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A YOUNG German (24) desires position, with a small or without salary, in a first-class Wholesale Druggist's or Chemist's, in London or provinces; speaks English, German, and some French; has perfect knowledge of double-entry bookkeeping, and has been 4 years in the trade in Germany; excellent references, both English and German. 24/14, Office of this Paper.

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8s. 6d. for 50 words or less; 6d. for every 10 words beyond.

BARCELONA (Spain).—Alfredo Riera & Sons, Druggists, 36 Ronda de San Pedro, possess exceptional facilities for the introduction and sale of Pharmaceutical Specialities and special products for use in arts and industry; would hold depot and accept the Agency for the whole of Spain; best guarantees and references.

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MR. A. CHAPMAN, Commission Agent, of Stone, Staffs, is prepared to take up Agencies in the Midland Counties, for good Wholesale Houses, on Commission; excellent references.

Gazette.

Partnership Dissolved.

Evans, J., and **E**vans, D. E., Swansea, physicians and surgeons.

The Bankruptcy Acts, 1883 and 1890.

RECEIVING ORDER.

Warke, Charles Lyle, Liverpool, doctor of medicine.

ADJUDICATIONS.

Bullen, Hewitt John Lysaght, Lichfield, Staffordshire, late Farnborough, Hants, surgeon.

Gray, Hector (lately carrying on business as Donald Gray & Sons), Southend-on-Sea, Essex, lately Mincing Lane, E.C., retired produce-broker.

Joseph, Hans Hertz, Newport, Mon., tooth-manufacturer.

Peck, Frederick William, Gleneldon Road, Streatham, S.W., chemist, out of business.

College Notes.

IMPERIAL COLLEGE OF CHEMISTRY.—Mr. Frederick Davis, principal of this College, has been registered by the Board of Education Teachers' Registration Council in column B (advanced education). Mr. Davis offered nine scientific subjects, including biology, botany, chemistry, human physiology, and zoology. The assessors chose botany and chemistry, and required Mr. Davis to give a lecture and class lesson upon these subjects at short notice (*i.e.*, half an hour), and subsequently a written paper, the questions dealing with the theory and practice of education. The examination was conducted in connection with the University of London.

METROPOLITAN COLLEGE OF PHARMACY.—The competitive examinations which close the summer session of this College were held on June 23 and 24. From 9 to 11 A.M. on the Thursday was devoted to inorganic chemistry (four questions), organic chemistry (three questions), and physics (method for determining the vapour-density of ether). From 11 A.M. to 1 P.M. was devoted to galenical pharmacy (three questions), general pharmacy (three questions), poison laws, posology, and Latin. In the afternoon the students had three hours of practical chemistry (quantitative and qualitative). The first two hours on the Friday were devoted to *materia medica* (six questions), and were followed by the same in botany; and from 2 to 6 P.M. the students had twice as much dispensing to get through as is given at the Minor examination. The results have not yet been announced.

THE EDUCATIONAL INSTITUTIONS advertising in this issue are as follows:—

South London College, 325 Kennington Road, S.E.

Metropolitan College of Pharmacy, 160 and 162 Kennington Park Road, S.E.

London College of Chemistry, 323 Clapham Road, S.W. Manchester College, 225A and 227A Oxford Road, Manchester.

Northern College of Pharmacy, 100 and 102 Burlington Street, Manchester.

Brixton School of Pharmacy, 171 Brixton Road, S.W. Burlington Correspondence College, 8 Crescent Grove, Clapham Common, S.W.

New Books.

These notes do not necessarily exclude subsequent reviews of the works. Any of these books can be supplied, at the published price, to readers of this journal on application (with remittance) to the Publisher of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

Dunglison's Dictionary of Medical Science. 23rd Edition. 34s. net. (Churchill).

Tilden, W. A. Specific Heats of Metals and Relation of Specific Heat to Atomic Weight. Part 3. 4to. Pp. 10. 1s. (Dulau.)

Faraday, M. Chemical History of Candle: Course of Lectures. Illus. 6 $\frac{5}{8}$ x 4 $\frac{1}{4}$. Pp. 118. 1s. net. (Unit. Lib.)

SOME ATTENTION is being paid by Europeans in Siam to the cultivation of the camphor-tree, which is said to grow well in Upper and Middle Tonkin.

The Glyn-Jones Testimonial.

THE following is the text of a circular which has been issued to the trade this week :

For some time a feeling has been growing that some tangible token of appreciation should be conferred on Mr. Glyn-Jones in return for the benefits he has worked so hard to secure for the trade. This feeling culminated in a meeting of a few of his friends at the St. Bride's Institute, London, E.C., on May 27, when a resolution was adopted pledging those present to take steps "to organise a testimonial to him in view of his services to the British drug trade, and on the occasion of his leaving retail pharmacy to practise at the Bar." The presidents and secretaries of local chemists' associations, the honorary local secretaries of the P.A.T.A., and other prominent gentlemen have been asked to join the committee and to assist in furthering the object. Up to the date of this letter 163 names have been sent in, and I think you will agree, after an examination of the list annexed hereto, that they are thoroughly representative. It is noteworthy that all the members of the Pharmaceutical Society's Council have joined the Organising Committee.

The intention of the committee is to present Mr. Glyn-Jones with a cheque for a substantial sum subscribed by well-wishers in all parts of the United Kingdom. This will be done at a Complimentary Dinner to be given to him on Wednesday, October 5, at the Hôtel Cecil, London. It is desirable that as many as possible should attend the dinner, tickets for which will be 7s. 6d. each (exclusive of wine).

It is suggested also that the autographs of subscribers (without amounts attached) be collected, in album form, and presented with the cheque and an address of thanks and congratulation. A number of subscriptions ranging

Mr. Alfred C. Abraham, Liverpool
 Mr. T. Fell Abraham, Liverpool
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 Mr. C. J. Park, Plymouth

from half-a-guinea to twenty-five guineas have already been promised. The Executive believe that it would be extremely distasteful to the recipient of the testimonial if anyone were to be pressed to give a subscription, but they will be glad if friends throughout the country will ask their trade acquaintances if they have received a copy of this letter—which it is intended shall reach every chemist in business. I shall be pleased to send a copy to anyone accidentally missed.

The following points may also be noted: No maximum or minimum subscription has been fixed, the committee preferring that everyone should give what he voluntarily prefers, although they suggest that the amount in each case should be proportioned to the benefit received, to say nothing of the esteem entertained.

An official receipt will be sent to each subscriber, but as most of the clerical work is being done by volunteers, *it is requested that remittances for all sums promised and payment for any dinner tickets required be sent in the first letter*, and that as few letters as possible requiring a special written reply be sent to the officers of the committee. It will tend greatly to minimise clerical labour if all remittances are sent and made payable to me.

If you desire to be associated with this testimonial to Mr. Glyn-Jones, I shall be obliged if you will send me your subscription and payment for any dinner tickets required at as early a date as possible.

I am, yours faithfully,

GEO. R. BARCLAY,

Hon. Secretary to the Committee.

95 Farringdon Street, London, E.C.,
 June 30, 1904.

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Ten shillings a year in advance, post free to any part of the world, including a copy of *The Chemists' and Druggists' Diary* next published. Single copy, 4d.; Summer or Winter Number, 1s.; *Diary*, 3s. 6d. Postal orders and cheques to be crossed "Martin's Bank (Limited)."

AS AN OFFICIAL ORGAN

THE CHEMIST AND DRUGGIST is supplied by subscription to the whole of the members of **NINETEEN PHARMACEUTICAL SOCIETIES** in the British Empire, including Ireland, Australia, New Zealand, South Africa, and the West Indies.

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DRESSING THE WINDOW.

ANYONE who has walked of a morning along Oxford Street, London, Fifth Avenue, New York, or one of the business Boulevards of Paris may have noticed that some one or other of the most successful shopkeepers has been dressing his window for the day. The frequent change and display of new goods is the secret of their success. It is their boldest advertisement. THE CHEMIST AND DRUGGIST is the shop-window of the drug-trade and its allied branches, and we want our advertisers to make

A GOOD SHOW IN THE SUMMER ISSUE

of July 30, 1904. It will go to the largest and best buyers at home and abroad—not to passers-by, but to men who sell the goods that are offered; not to *dilettanti*, but to live business men, who look in THE CHEMIST AND DRUGGIST advertisements for the ideas that should help them to stimulate their own trade by getting goods that will incite their customers to buy. This is the object of business and the purpose of advertising in the C. & D.

Summary.

ASSISTANTS appear to be very scarce in the United States, and the wages are rising (p. 35).

THE COUNCIL of the Institute of Directors objects to Clause 7 of the Pharmacy Bill (p. 3).

THE KING'S BIRTHDAY HONOURS include knighthoods to Professor James Dewar and Dr. Thomas Stevenson (p. 3).

TWENTY TWO CHEMISTS have passed the Sight-testing Examination of the Spectacle-makers' Company. Their names are on p. 3.

THE GLYN JONES TESTIMONIAL circular has been issued by the committee this week, and is reprinted in our Coloured Supplement.

THE BRITISH PHARMACOPOEIA compilers get a severe criticism from the "Hospital" for allowing the ext. belladonnae muddle (p. 34).

DR. DOEBEL, in the first of his series of papers on "Salts, and the Ionisation Theory" deals with the historical and general aspects of salts (p. 2).

THE PHARMACEUTICAL SOCIETY OF RHODESIA has had a successful year, and has again adopted THE CHEMIST AND DRUGGIST as its official organ (p. 36).

THE ADRENALIN PATENT is reported to be the subject of lawsuits to be taken in the United States by Messrs. Parke, Davis & Co. against several American firms (p. 22).

MR. D. B. DOTT has been re-elected Chairman of the North British Branch of the Pharmaceutical Society, and Mr. Alexander Strachan, of Aberdeen, succeeds Mr. Dunlop as vice-chairman (p. 9).

A PRECIPITATE of strychnine in mixtures containing bichromates and sal volatile does not always take place. Mr. George Roe has investigated the matter, and gives useful practical notes on page 34.

ANOTHER South African difficulty has been raised by the Customs Conference held at Cape Town. It is to advance the *ad valorem* duty on medicinal preparations from 10 per cent. to 25 per cent. (p. 36).

A BRIGHTON SHOP occupied by Boots Cash Chemists (Southern) (Limited) is undergoing alterations, and certain persons interested applied to the High Court for an injunction to stop the company. In this they have failed (p. 22).

THE B.P.C. meeting at Sheffield in August promises to be a successful gathering. We give notes of a conversation with Mr. Newsholme about it and the last one; points from the pink circular; and some hints as to how to spend a holiday in Sheffield (p. 12).

ALTHOUGH the Executive of the North British Branch has been too late to get pharmacy included with dentistry and medicine in Sir John Tuke's return, we are able to give figures which show that up to the present 1,328 companies have been registered to carry on business as chemists (p. 18).

THE HALF YEARLY STOCKTAKING in the drug-trade has reduced wholesale wants to the smallest dimensions this week. Quinine is 4d. lower "officially"; saffron is about 1s. 6d. lower; almond oil has been reduced 1d.; and clove oil is the turn easier. Ordinary sulphate of copper is 10s. per ton cheaper (p. 29).

THE ACTION of the Cape Government in placing a tax of 1s. per proof gal. on imported medicinal tinctures has been discussed by the Chemical Section of the London Chamber of Commerce and a committee appointed to move in the matter (p. 15). We show in some comments that the duty has been secured on a false basis, and that it appears to be *ultra vires* (p. 19).

THE TWO CHEMISTS who were called to the Bar last month have not wasted time in getting into harness. Mr. Marshall Freeman was counsel for the defence in a debt case at Leicester last week, and he won. Mr. Glyn-Jones had an adulteration case at Malvern on Wednesday, ammonium carbonate being the deficient "drug," but Mr. Glyn-Jones satisfied the Magistrates that it is not necessarily a drug and there is no commercial standard (p. 24).

MR. THOMAS TYRER, speaking at the London Chamber of Commerce this week, gave the latest information regarding the movement *re* untaxed alcohol for industrial purposes. The combination of interests in the matter, especially with automobile authorities, has resulted in the Chancellor of the Exchequer promising to have the law so amended that motorists may be able to obtain more than one gallon of methylated spirit from licensed retailers. No proposal has yet been brought before the House, but when it does, and the law is altered, chemists as retailers of methylated spirit ought to do good business with motorists (p. 14).

Corner for Students.

CONDUCTED BY LEONARD DOBBIN, PH.D.

Salts, and the Ionisation Theory.

WE now begin the publication of the series of papers dealing with the general nature and properties of salts in solution which, as intimated last week, we propose to print during July, August, and September. The papers of this series are designed to serve as an introduction to the ionisation theory of solution, and will appear weekly. The earlier papers will deal with historical and general matters concerning salts, and the later papers with the ionisation theory and some of its applications. At the conclusion of the series we propose to offer prizes for the best answers to a set of questions on the subjects dealt with in the papers, or on matters related to these subjects.

SALTS : HISTORICAL AND GENERAL.

The name *salt* (*lat. sal*) was first given to the substance which is still known popularly by that name, with or without a qualifying prefix (common salt, sea salt, rock salt). Gradually it came to be employed as a generic or class name for various other substances which resembled common salt in some respect or other, though different writers apparently had widely different views as to the particular characters which should serve as a basis for the classification. The standard most generally adopted, for a time at any rate, appears to have been the property of dissolving in water, and crystallising from the solution on evaporation of the solvent; but such widely different characters as taste and fusibility or volatility also had prominence assigned to them by some. At one time the term salt was employed to designate not the substance itself, but a supposed elementary principle—that of fixedness and incombustibility. Those salts which were clearly recognised as distinct species were distinguished by special names which were often descriptive of the source, or of some striking property, of the salt, or were derived from the name of the discoverer. Thus we have such names as *sea salt*, *saltpetre*, *Epsom salt*, *sal volatile*, *Glauber's salt*.

By employing, as a basis of classification, such a general property as that of crystallising from aqueous solution, the substances to which the name salt was applied by the alchemists and early chemists formed rather a heterogeneous group as viewed from our present standpoint. Nevertheless, a large number of these substances (especially those of inorganic origin) still continue to rank as salts in the classification which is adopted at the present time. Among the crystallisable substances, and therefore "salts" in the then accepted sense of the term, which became known comparatively early, there were some of organic origin (vegetable, in most cases) which possessed peculiar properties distinguishing them markedly from other crystalline salts. Their solutions all possessed a sour taste, and also produced striking changes of colour when added to certain vegetable extracts; for example, purple tincture of litmus (a colouring-matter obtained from some lichens) was changed to bright red, as was also blue syrup of violets, on the addition of a small quantity of one of these sour solutions. These solutions were found also to have the property of dissolving many substances insoluble in water, as shown by their corrosive action on certain metals; in some cases (with the metals, and also chalk, for example) the process was accompanied by brisk effervescence. These substances were classed together as "acid salts," in reference to their sour taste in solution (*lat. acidus, sour*). It was found that the above-noted peculiarities of "acid salts" were shared also by some substances which did not possess the property of crystallising from aqueous solution. Although deficient in this respect these were nevertheless classed as "acid salts," because they possessed the acid character so markedly that their kinship with the crystalline "acid salts" could not be overlooked. The most important of the substances thus included as "acid salts" were not of organic origin, and are even yet referred to as the "mineral" acids. The three best known were: "oil of vitriol," obtained by distilling the vitriols (a class of salts which were so named on account of the glassy appearance of their crystals);

"spirit of salt," obtained by distilling common salt with alum, with one of the vitriols, or with oil of vitriol; and "aqua fortis," similarly obtained by distilling saltpetre with alum, with a vitriol, or with oil of vitriol.

In addition to the so-called "acid salts," a number of other substances were early recognised as possessing in common certain peculiar properties which marked them out as a special class of salts by themselves. Their aqueous solutions all had the same "mawkish" taste; they acted upon various vegetable colouring-matters in a manner the reverse of that observed with acids, restoring the original colour to tincture of litmus or syrup of violets which had been reddened by acid solutions, and, if added in quantity more than sufficient to produce that change, imparting a distinct blue colour to the tincture of litmus and a green to the syrup of violets; yellow extract of turmeric-root was turned brown by them, and this change could be reversed by acid solutions. Substances belonging to this class were called "alkaline salts." The word *alkali* is of Arabic origin, and is probably derived from the name of a plant yielding ashes from which an alkaline salt could be extracted in considerable quantity. The alkaline salts clearly distinguished in comparatively early times were the *vegetable alkali*, later known as potash, obtained by the lixiviation of wood-ashes and evaporation of the solution, or from the ashes of the tartar deposited in wine-casks during fermentation; the *mineral alkali*, later known as soda, found in some rainless deserts and dissolved in the water of certain lakes; the *volatile alkali*, obtained by distillation from dried animal matters (urine, &c.). Moreover, it was known at an early period that new substances, possessing the alkaline character in a much more marked degree, could be prepared from the first two of these alkaline salts by the action of slaked lime on their aqueous solutions, and evaporation of the clear liquids to dryness. On account of their highly corrosive action on organic tissues these new substances were called the *caustic alkalies*, and, in contradistinction to them, those from which they were prepared became known as the *mild alkalies*.

These two classes of salts, acid and alkaline, were found to be mutually destructive of each other's characteristic properties when their aqueous solutions were mixed, and, when the resulting solutions were evaporated, substances were obtained which, like common salt, yielded solutions that were neither acid nor alkaline, and otherwise more or less closely resembled common salt in general behaviour. Such substances were, therefore, called "mixed salts" or "compound salts." To take a particular example: when spirit of salt was "saturated" with mild mineral alkali (soda), so that the solution no longer showed any acid character, and the resulting solution was evaporated, crystals of common salt were obtained. The same result was arrived at by using caustic mineral alkali, the only difference being that whereas in the former case the process of saturation was attended with brisk effervescence, in the latter this was absent.

"Alkaline salts" were not the only substances which could saturate "acid salts" to produce new salts of the mixed type; this property was shared by many of the "earths," which were substances conspicuously fire-resistant and insoluble in water. These earths included chalk and quicklime (which were looked upon as merely varieties of the same substance, although the latter was known to be somewhat soluble in water while the former was not appreciably soluble), magnesia, and the "calces" or ashes obtained when metals were heated in air. It was also known that certain metals, when dissolved by "acid salts," saturated these and gave the same "mixed salts" as were obtained from their calces.

Notwithstanding the knowledge of salts and their properties which was gradually accumulated, no reasonable theory as to their real nature was possible until the foundation of modern chemistry was securely laid, in the latter half of the eighteenth century, by the recognition of the true character of the chemical actions which take place during ordinary combustion and the calcination of metals. The metallic calces were found to be compounds formed by the union of the metals—elements—with oxygen—also an element. It was also found that many substances which formed acids in an aqueous solution were compounds of oxygen with non-metallic elements, such as

sulphur and phosphorus. After this the name salt became restricted to those substances which were previously classed as "mixed salts," and the original "acid salts" were called simply **acids**. The oxides, &c., which saturated acids to form salts were classed together as **bases**, and those bases which dissolved in water to form alkaline solutions were specially designated as *alkalies* and *alkaline earths*. The substances previously known as the mild alkalies had now been recognised as really "mixed salts" derived from an acid which possessed the acid character to a very feeble extent. The exact nature of the alkalies and alkaline earths could not at that time be proved; but from analogy it was assumed that they also must be oxidation-products of metals, although the metals themselves were not obtainable by any means then available.

English News.

Local newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Brevities.

The Royal Photographic Society's annual exhibition—the forty-ninth—will be held at the New Gallery, 121 Regent Street, W., from Thursday, September 22, to Saturday, October 29.

We understand that nearly a hundred members of the Society of Chemical Industry on this side of the Atlantic have indicated their intention of attending the annual meeting in New York next August.

Geo. Duell, a porter employed by Mr. Arthur H. Norman, chemist and druggist, Abbegate Street, Bury St. Edmunds, was on June 23 sent to prison for one month for embezzling money belonging to his employer.

The new country extension of the Brompton Hospital for Consumption and Diseases of the Chest, which has been built at Heatherside, Surrey, was opened by the Prince and Princess of Wales on Saturday, June 25.

The Wolstanton and Burslem Board of Guardians have accepted the tender of Mr. A. P. Tiley, chemist and druggist, of Burslem, for a year's supply of drugs to the workhouse, and that of the Sanitas Company for sanitary scaps.

The Ex-Libris Society have a capital exhibition of pictorial bookplates this week at 20 Hanover Square W. Among the plates is that of Dr. Priestley, the discoverer of oxygen. The device includes a group of children blowing bubbles.

At the Hastings Borough Bench on June 23, Angus White (15), employed as errand-boy by Mr. Fred Brooks, chemist, Queen's Road, was bound over to come up for judgment if called upon for stealing a sovereign, the property of his employer.

The Isle of Wight Board of Guardians have accepted the tenders of Messrs. C. J. Hewlett & Son, London, Mr. E. H. Morris, chemist and druggist, Newport, and Mr. A. Millidge, chemist and druggist, Newport, for the supply of drugs to the workhouse.

At Bow Street on June 29, Henry Whitbread (who said he was for some time a soap and chemical manufacturer in Leicester and that he afterwards went to Ireland and taught a certain firm how to make fancy soaps) was committed for trial on a charge of bigamy.

Another serious burning accident has occurred in the preparation of furniture-cream. Mrs. Kent, of Ripley, was heating the ingredients for furniture-cream on a gas-stove, when the mixture ignited, setting fire to her dress. She was severely burnt before being rescued.

At the Central Criminal Court on June 24, Woolf Wiesberg and Max Strauss were found guilty of applying false trade-marks to 3,120 incandescent mantles and of having in their possession certain forged trade-marks (see *C. & D.*, June 18, page 951). Strauss was sentenced to nine months' and Wiesberg to four months' imprisonment.

At the Cornwall Assizes, Bodmin, on June 23, Mr. Justice Ridley and a special jury concluded an action (the hearing of which had lasted three days), in which Mr. Ernest Frederick Uren, chemist and druggist, Hayle, sought damages and an injunction against a neighbour for trespass. The jury found for the defendant on both points.

Spectacle-makers' Company.

In the list of those who passed the new sight-testing examination of the Spectacle-makers Company (*C. & D.*, June 18, page 970) are the following chemists:

Burrell, T., Montrose	Frowde, J. J., Douglas
Bennett, G., Stockport	Gray, W., Walthamstow
Bayley, L., London	Haslepl, G., Oldham
Bunker, C. J. G., Twickenham	Kemp, H., Chorlton - cum -
Cesar, J., London	Hardy
Cherry, F., Walton-on-Thames	Kidd, J. C., Manchester
Cuff, J. H., New Southgate, N.	Phillips, I. R., Chesham
Dawson, H. G. W., Derby	Simm, A. E., Nuneaton
Dewing, J. E., Goole	Stephens, S., Huddersfield
Ebbage, H. E., London	Tugwell, E. H., London
Francis, A. L., Wrexham	Wilson, J. B., Dorking
Fox, W. A., Leeds	

Of the seventy-six opticians who passed the examination twenty-two are registered chemists.

British Pharmaceutical Conference.

A meeting of the Executive Committee was held at 16 Bloomsbury Square, W.C., on June 24—present, Mr. T. H. W. Idris (President), in the chair, Dr. Attfield and Mr. Naylor (Vice-Presidents), Mr. Antcliffe, Mr. J. C. Umney (Hon. Treasurer), and Messrs. Peck and White (Hon. Secretaries). Apologies for absence were received from Messrs. Boerne, Dott, Matthews, News-holme, Payne, Ransom, and George Squire. The Hon. Secretaries announced that their letter of May 25 conveying the resolution passed at the special general meeting on May 17 was submitted to the Council of the Pharmaceutical Society, and had been referred to the Compendium Committee, but that no reply from the latter had been received. Mr. Antcliffe attended to present the proof of the pink circular containing the programme of the Conference week. After slight revision this was unanimously and heartily approved of. A preliminary list of officers for 1934-5 was drawn up. Nine gentlemen were elected to membership.

Chemists' River-trip.

A committee consisting of Mr. R. W. Emerson (177 Regent Street, W.), Mr. J. C. Spencer (111 Brixton Hill, S.W.), Mr. G. E. Davis (10 Kilburn Priory), Mr. A. R. Arrowsmith (4 Stratford Place, W.), and Mr. C. S. Present (Messrs. J. Sanger & Sons, 2 Winsley Street, W.) are busy arranging the details of an all-day trip on the Thames. It is proposed to hold the excursion on Sunday, July 17, so as to afford an outing to chemists who have but limited opportunities in that direction. The trip will probably include at a small price the expenses of the train and boat journey as well as luncheon. Mr. Present is the Hon. Secretary of the movement, and from him tickets and further information will be obtainable.

King's Birthday Honours.

On the occasion of the official celebration of his birthday, King Edward VII. conferred a number of honours upon public men. Mr. Parker Smith, one of the backers of the Pharmacy Bill and member for the Partick Division of Lanarkshire, is to be sworn as a member of the Privy Council. Knighthoods are to be conferred upon Professor James Dewar, F.R.S., of the Royal Institution, and upon Dr. Thomas Stevenson, scientific analyst to the Home Office, and Visitor on behalf of the Privy Council to the meetings of the Pharmaceutical Board of Examiners for England and Wales. Mr. Robert Henderson, Secretary to the Board of Customs, and Mr. J. B. Meers, Secretary to the Board of Inland Revenue, are to receive the Companionship of the Bath, while Sir Henry Primrose, K.C.B., Chairman of the Board of Inland Revenue, and Mr. S. D. Leah, chief inspector of Excise, receive the Companionship of the Imperial Service Order. A number of doctors connected with the Army Medical Staff and the Indian Medical Service also receive honours, and a colonial knighthood is conferred upon Dr. St. John Franks, C.B., of the Transvaal.

Company Directors and the Pharmacy Bill.

The Council of the recently formed Institute of Directors (of which Lord Avebury is the President) have been considering several Bills now before Parliament, and have passed resolutions relating to them. In regard to Clause 7 of the Pharmacy Bill, they have ex-

pressed a strong opinion that it is undesirable to limit the qualifications of directors in the way proposed.

Dispenser and Analyst for a Guinea a Week.

The Hammersmith Guardians, on June 29, appointed Mr. John Metcalfe, of Bishop's Terrace, Fulham, S.W., as outdoor dispenser for the parish. With regard to the dispenser's remuneration, the Dispensary Visiting Committee recommended that the amount should be one guinea per week, and that, in addition to his ordinary duties as dispenser, the newly appointed officer should be directed to make an analysis, once a week, of the milk supplied to the receiving home and to the temporary infirmary. The Vice-Chairman of the Board—Mr. Charles Pascall—who is also the Mayor of Hammersmith, asked how they could find it in their hearts to offer an efficient dispenser, who had to undergo several years' training, less remuneration than they would be obliged to pay a common, ordinary labouring man. Some of the other Guardians considered the amount recommended quite inadequate, and the question as to remuneration was referred back to the committee for further consideration.

Birmingham Notes.

In the journeys among the faithful the cry is still the badness of trade, and whether it be in the west or east end of our city there is the same complaint—few customers, idle hands, no epidemics, and mostly out for holidays.

On Friday, June 24, the annual distribution of prizes to workpeople for their suggestions for improvements of processes or the like at Messrs. Cadbury's was held, when 150/- in sums varying from 2s. 6d. to 5/- was presented by Mrs. Barron Cadbury.

At a quarter-past six on Monday evening, June 27, a gentleman expired very suddenly while in the shop of Messrs. Snape & Sons, chemists, Great Hampton Street, Birmingham. He was later identified as Percy Sherrin Fabry (45), 36 Reservoir Road.

Fires.

A large vat containing about 600 gals. of methylated spirit caught fire unaccountably on June 28, causing considerable damage to the premises of Messrs. Waters & Co., licensed methylators, in Bateman Row, Curtain Road, Shoreditch, and seriously injuring one of the employés. A portion of the roof was blown off, and a door was torn from its hinges and hurled into the street. Part of the premises also caught fire, but the flames were extinguished in about an hour.

A fire, which caused great excitement in the West Ham district, broke out on Tuesday, June 28, at the factory of the Jeyes' Sanitary Compounds Company (Limited), which extends from Richmond Street to Pelley Street, Plaistow. Fortunately the majority of the 200 hands employed in the place had gone to dinner, and the small number who remained speedily effected their escape from the second floor when they saw the room filling with smoke following an explosion in the vicinity of the mixing-baths on the floor below. In a very short time two fire-brigades were on the scene, and in the course of two or three hours they had completely subdued the outbreak, but the main building, including the offices, was completely gutted. About 10,000 gals. of disinfectant, in bottles and tins, was completely destroyed, as well as a large stock of toilet-soaps. Six large tanks of disinfectant in the yard were untouched, and filling and packing were begun at once in an out-building. The powder and soap factory and the manager's house escaped. The damage is estimated at about 5,000/-.

Sheffield Notes.

Professor W. Carleton Williams has resigned the professorship of chemistry which he has held at Sheffield University College for twenty-one years.

The balance of the University Endowment Fund is coming in but slowly, among the last issued list of donations being the name of Mr. J. T. Dobb, chemist and druggist, who is contributing 20/-.

At the annual meeting of shareholders in the Sheffield Mineral-water Syndicate, held at the Cutlers' Hall, on June 22, the report and accounts were unanimously adopted, on the understanding that a conference between

twelve or fifteen of the largest shareholders and the directors take place at an early date, to consider the propriety of reorganising the company.

By an unusual coincidence two cases of poisoning were found in the street by the Sheffield police on June 24. A woman was discovered by a police-constable apparently suffering great pain having taken a quantity of liquid ammonia. The same evening the police found a man lying in Norfolk Street, vomiting and apparently seriously ill, with a nearly empty laudanum-bottle in his possession. Family troubles in each case.

Mr. Stuart Wortley, M.P., has presented to the House of Commons a petition from the Sheffield Health Association praying the House to pass into law the Bill to consolidate and amend the Alkali, &c., Works Regulation Acts, 1881 and 1892, in view of the fact that some of the provisions of these Acts are capable of such interpretation as to nullify their objects, and to defeat their obvious intention as regards the control of sulphuric-acid manufacture.

Cricket.

Playing against Nottingham Banks on June 23, the Nottingham Chemists scored 95 runs against their opponents' 126, thus losing by 31 runs. The top scorers for the Chemists were J. Bowmer, 28; G. Skelton, 16; H. Henshaw, 11; and A. H. Boggis, 10.

An Incompleted Bargain.

A chemist, wishing to sell out in a certain part of Manchester recently, agreed to accept 7l. 10s. for his fixtures and stock-in-trade. The purchaser wanted the key in order to remove the goods the day before the seller had to deliver up possession, but the chemist would not part with it, even though all his furniture had been removed. So the bargain was never completed.

A Charge of Arsenic-poisoning.

Elizabeth Nicholson and Thomas Medcalf were charged at Appleby Assizes on June 28 with the murder of an old farmer named Gilpin by poisoning with arsenic. The Grand Jury threw out the bill against Medcalf, who was discharged. The trial of Nicholson was continued, evidence being given on the first day by Mr. Richard Hepe, pharmaceutical chemist, Kendal, who deposed to selling three-pennyworth of arsenic to Nicholson, who said she wanted it to poison rats. Medical evidence was given of a *post-mortem* examination by two doctors, both of whom found symptoms analogous to those of arsenic-poisoning. Dr. Hellon, the county analyst, deposed to finding arsenic in the stomach of the deceased. Sir Thomas Stevenson, the Home Office expert, stated that arsenic was present in the internal organs to the amount of .689 gr. In the liver and kidneys he found .195 gr. of arsenic, pointing to the absorption of a fatal dose of the drug, which could not have been less than 3 or 4 gr. His conclusion was that arsenical poisoning was the cause of death. The trial was not concluded when we went to press.

The Week's Poisonings.

Twelve fatalities from poisoning have taken place during the week, five of which were misadventures. Carbolic acid was taken by a Brighton tram-conductor, named Walter Thomas (23), by Madge Lloyd (20), of Liverpool, and by James Edward Corrin (29), of Douglas, Isle of Man. All three committed suicide. Oxalic acid caused the deaths of a Walworth potman, named James Fordham (31), and a Gaywood woman, Sarah Lloyd. Fordham left a letter showing that he intended suicide, but the coroner's jury returned an open verdict in the case of Mrs. Lloyd. Two misadventures and one suicide with laudanum are reported. Mrs. Jane Lee, of Kirkham, near Preston, who had taken laudanum habitually for thirty-five years, took the usual overdose. Thomas Barnes, a Boston carpenter, took an overdose with the idea of inducing sleep. Charles James Grey, leading cornet and trumpeter at Covent Garden Opera-house, injured his lip and could not play his instrument. This so weighed upon his mind that he took a fatal dose of laudanum and died in St. Thomas's Hospital. Ralph Henry Luckhurst, sixteen months old, son of a labourer at Faversham, drank a quantity of creosote he found in a bottle which had been left on a chair, and died from the effects. Edith Smith, three years of age, daughter of the chief clerk at Colchester

Post-office, died from aconite-poisoning. It is presumed that the child had plucked and eaten portions of some monkshood growing in the garden. The Coroner at the inquest recommended that monkshood-plants in gardens should be destroyed.—Jane Sutch, of Greenwich, accidentally drank a fatal quantity of liquid ammonia in mistake for whisky. Her husband said at the inquest that "deceased's smell was at times very bad."—John Ridley, a Battersea builder's labourer, poisoned himself with "chloraline."—In the course of an inquiry at Wivelishie into the death of a sergeant of the Royal Artillery, who was found dead with a bottle containing cyanide of potassium near him, it was stated that the cyanide was used for cleaning gold lace. The Coroner commented on the danger of poisons being kept in barrack-rooms, and pointed out that the cyanide of potassium in question was in a bottle labelled "Chutnec." The officer present undertook to issue orders that all poisons, whether used for cleaning uniforms or not, should be destroyed. It was shown that the man died from natural causes, and a verdict to that effect was returned.

Irish News.

Local newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

A Dispenser's Salary.

The Local Government Board want an explanation from the Londonderry Guardians as to why they have increased the salary of the workhouse dispenser. Efficiency, experience, and good conduct of the officer is the answer.

Business Changes.

Messrs. Haydeck & Co. (Limited), chemists and druggists, Dublin, have opened a shop on the South Circular Road, near Dolphin's Barn.

The Munster Medical Company (Limited) have acquired extensive premises in the Main Street, Templemore, and are preparing to open a pharmaceutical establishment there. Mr. A. R. Looby, late of Messrs. O'Connor's, Athlone, and also late of Dublin, is secretary of the company.

Personal.

Sir Charles Cameron, a former member of the staff of Hamilton, Long & Co., State apothecaries, Dublin, has been elected Secretary of the Royal College of Surgeons in Ireland.

An excellent photograph appears in the current issue of the "Alexandra College Magazine" of Miss Jennie Wells, daughter of Mr. W. F. Wells, Vice-President of the Pharmaceutical Society of Ireland. Miss Wells, who is one of the College students, recently received a valuable prize of books from the Senate of Dublin University, and also successfully competed for a College scholarship worth some 40*l.* The young lady is well inside her 'teens, and her success, therefore, is all the more remarkable.

Burglary at a Chemist's.

A burglary was last week committed on the premises of Mr. George Lane McCormick, pharmaceutical chemist, Monkstown. During the night the pharmacy, to which is attached the local postal and telegraph office, was broken into and postage-stamps of the value of 4*l.* 10*s.* taken. A number of official documents were destroyed, but the safe, which contained 50*l.* in cash, successfully resisted the efforts of the burglar. No arrests have yet been made.

Amazed the Magistrate.

In a recent prosecution for milk-adulteration at Dublin, the certificate of Sir Charles Cameron, city chemist, showed that the sample analysed contained 29 per cent. of water. Professor C. R. Tichborne's analysis of the same article gave only 5 per cent., while the certificate of Somerset House (to which the disputed sample was forwarded) showed 49 per cent. of water. The Magistrate expressed amazement at the conflicting analyses of three eminent authorities. He fined the defendant 10*l.*

Irish Assistants' Association.

During the last few weeks the executive members of the Irish Chemists' Assistants' and Apprentices' Society have been engaged in the preliminaries for re-opening the

winter session at 75 Harcourt Street. A feature of the winter's work will be efforts to secure for assistants and apprentices a weekly half-holiday all the year round, which is expected greatly to popularise the society.

A Happy Recovery.

The "Dublin Evening Herald" tells a little story about a local hospital whose staff wanted to try radium on a man suffering from a diseased eye. The good lady who orders drugs in the dispensary was asked to order a sample of radium, and she wrote for an ounce or two. By return of post came a polite note from the wholesale druggists informing her that the goods had been sent on, with the exception of the radium. They did not know exactly where they could procure so much of it, but they would try if she would send on an instalment of 150,000*l.* required. The "Herald" says the lady recovered in two days.

Apothecaries at Dinner.

At Dublin, on June 25, the annual dinner of the Apothecaries' Hall of Ireland was held in the Gresham Hotel—Dr. Atock, L.A.H. (Governor) presiding. The usual loyal toasts having been honoured, Sir Charles Cameron, in proposing "Prosperity to the Hall," dwelt on the ancient foundation of the Apothecaries' Hall of Ireland, which went back to the year 1746, and upon the Charter of 1791 under which the Hall now exists, by which it is bound to make and vend none but the purest of drugs. He also laid stress on the fact that despite every opposition, both in Dublin and in England, it has weathered a severe storm and is at present, both as an examining body and as a commercial enterprise, doing good work and likely before long to be still more prosperous. "The Health of the Guests" was proposed by Colclnd Adye Curran, L.A.H., and responded to by Dr. Royer, of Philadelphia, who complimented his hosts and extolled the arrangements in Dublin for the treatment of infectious diseases and the lead taken by Ireland in chemical and pharmaceutical research.

Guardians' Tales.

The analyst has reported that a sample of linimentum terebinthinae forwarded to him for analysis from the Keadue dispensary of the Boyle Union was not up to the standard. The Guardians have requested the contractor to send a fresh supply.

The Dundalk Board of Guardians have authorised the medical officer of the Ravensdale dispensary to obtain his drugs locally and charge the contractor, on the ground that the last-named is not fulfilling his contract. The offence of the contractor is said to have committed is that he has not given the weights of the drugs on the invoices.

Mr. White, of Sligo, claims 15*l.* odd for unreturned empties from the Newry Union, and the matter was further discussed by the Guardians at the last meeting. Mr. White offers to pay carriage on the empties, but naturally objects to pay the Union porters for packing them. The Guardians consider Mr. White's attitude quite reasonable, and are going to compel the porters to have the empties removed.

The Local Government Board having written to the Sligo Board of Guardians as to what is considered excessive expenditure on medicines at the Riverstown dispensary, Dr. Frazer, the medical officer, points out to the Guardians that the number of patients who produced tickets (396) by no means represents the number treated at the dispensary. He estimates the total at about 1,334, and for these 4*l.* 9*s.* 3*d.* spent on drugs is not excessive. The letter was considered satisfactory.

Scotch News.

Local newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Edinburgh Chemists', Assistants', and Apprentices' Association.

The summer meeting of this Association was held at 36 York Place, Edinburgh, on Wednesday, June 22, at 8.30 p.m., Mr. Archibald Currie (President) in the chair. An interesting collection of local plants, gathered in Cullin-

ton Dell, Blackford Hill, Poet's Dell (Currie), and Craigcrook Marl-pit, chiefly by Misses Glass and Watson, and representing thirty-three natural orders, seventy-one genera, and 104 species, had been systematically arranged by them on tables in accordance with Bentham and Hooker's "British Flora," and to each specimen was attached a small card indicating the systematic and the common names and the natural order. At 9.15 P.M. Mr. J. Rutherford Hill gave a practical demonstration. Thanks to him and to Misses Glass and Watson concluded the meeting.

The third botanical excursion took place to the Poet's Dell on Friday, June 24, under the leadership of Mr. Archibald Currie, President. The party travelled by 6.15 A.M. train from the Caledonian Station. The weather was favourable, and a most enjoyable time was spent in field-work in the exhilarating morning air and amid the charming scenery of the Poet's Dell. The rockwork above the Poet's Well was covered with a magnificent green-and-white screen of *Asperula odorata*. The party returned to town by the 8.29 A.M. train, and it was felt that if the pleasure of these early morning outings were better known a much larger number of members would make an effort to attend.

Dundee Notes.

The "Dundee Evening Telegraph" reports a brightening of North Tay Street, hitherto a rather dull region of the town. New tenements and shops have been erected, and the old-established "Apothecaries' Hall" at the corner of Tay Street and the Overgate, belonging to Mr. John Hodge, has been rejuvenated. Among other improvements Mr. Hodge is installing a soda-fountain.

A striking portrait and appreciative sketch of ex-Bailie Doig, chemist and druggist, High Street, Dundee, appears in a recent issue of the "Wesleyan Methodist Church Record." From the notice we learn that Mr. Doig was born in Kirriemuir, and commenced business in Castle Street, Dundee, in 1861. His public work on the School Board and on the Town Council is outlined, and special attention is devoted to his long and faithful service to Methodism.

Edinburgh Chemists' Golf Club.

The annual "bogey" competition for the medal presented by Mr. David Brown was played over the Praids on Thursday, June 23. There was a large turnout, but a strong wind was against low scoring, and Mr. D. N. Wylie (7-3=4 down) and Mr. C. F. Henry (9-5=4 down) tied for the medal. Mr. Edward Steven (15-9=6 down), Mr. D. S. Philp (7 down), and Mr. C. Officer (12-5=7 down) tied for fourth place.

Glasgow Notes.

The new Society of Chemist-Opticians is making a fair number of members in Glasgow.

The canvassers for chemists' calendars are already on their rounds with specimens of these artistic products for 1905.

The Glasgow delegates to the Sheffield Conference and Federation meeting are Messrs. W. L. Currie, J. P. Gilmour, R. Brodie, R. McAdam, and George Robertson.

Rae, the bonesetter, the so-called "Miracle-worker of Blantyre," just discovered by a sensation-mongering Press, used to have a practice on the South Side of Glasgow. He did not then ignite the Clyde to any extent.

The admirably arranged N. O. beds in the Corporation Botanic Gardens are at their best just now, and candidates for the forthcoming Minor hover about the plants like bees—and often with a like felonious intent.

A chemist who suffers from the competition of unqualified persons in his neighbourhood has issued a circular headed "The Only Qualified Chemist in — Street," in which he warns the public against the encouragement of illegal trading.

There is an unprecedentedly large body of unemployed chemists' assistants. Employers are receiving daily calls from men out of work; and the other day the applicants to a suburban chemist included a full-blooded Jamaican negro, with London experience.

A patient who was admitted to one of the city hospitals the other day, suffering from carbolic-acid poisoning, had

been the victim of a cruel practical joke. He was an inmate of a common lodging-house, and placed his whisky-bottle under the pillow for greater security. During the night a fellow-lodger abstracted the flask and substituted for it a bottle of carbolic lotion, with the above result.

In the window of an old curiosity shop in Byns Road there is to be seen at present a small marble mortar and pestle, the former yellow with age and grime, and labelled "This belonged to Dr. Edward Pritchard, the notorious poisoner." A relic of a more inspiring character is on view in the window of Messrs. Hilliard, surgical-instrument makers, in Renfield Street. It is the pocket instrument-case carried about by Dr. Livingstone until his death at Illala, in Central Africa.

French News.

(From our Paris Correspondent.)

THE PASTEUR MEMORIAL FOR PARIS.—The inauguration of this monument will take place on Saturday, July 16, instead of July 13, as originally announced, to suit the convenience of the President of the French Republic, who will be present.

NOTICE TO ASSISTANTS.—M. A. Martin, a non-qualified pharmacist's assistant, who was recently dismissed with a week's salary instead of notice, summoned his employer, who is in business near the Grand-Opera, Paris, for compensation, and obtained payment for an additional eight days. The Justice of the Peace who heard the case decided that an assistant is entitled to at least a fortnight's notice providing there is no serious or legitimate motive for summary dismissal. Hitherto there has apparently been some uncertainty on the point.

THE MOSQUITO-TRouble.—During the past few summers mosquitoes have been very troublesome in Paris and the suburbs, and there are signs that they will reappear with the hot weather to be expected in July and August. Some Paris pharmacists now stock regularly those evil-smelling anti-mosquito pastils for fumigation which visitors to Venice know so well, and other anti-mosquito preparations. The trade is found to pay. The officials of the city of Paris have just issued a list of instructions as to the best means of combating the mosquito-trouble.

THE SORCERESS OF MARLY.—A woman named Martin, known as the sorceress or enchantress of Marly (near Paris), was put on her trial at the assizes here a few days ago on the charge of having caused the death of a widow, Mme. Chappuis, and of having inherited considerable property from her by undue influence. There were suspicions that the deceased lady had been poisoned, but M. Rabot, a well-known pharmacist of Versailles, who was called in as expert, showed that death was due to natural causes. A good deal of evidence was brought forward as regards spiritualism, in which Mme. Martin was an expert, and it was shown that she was in the habit of drinking sundry concoctions supposed to be endowed with magic properties. There was also a suggestion that Mme. Chappuis had been drugged by the prisoner for the purpose of obtaining greater influence over her. The Court decided that Mme. Martin's conduct had by no means been above suspicion, and she was sentenced to four years' imprisonment and a small fine. The natural heirs also recover the legacy left to the sorceress.

A TYPICAL FRENCH WATERING-PLACE.

THIS is the time of year when the professional idlers and invalids who evade the rigours of the English winter on the Riviera, in Algeria, or in Egypt begin to stroll homewards. One of the places they strike is Aix-les-Bains, a charming little town, which out of season numbers some five thousand inhabitants, but at the present time accommodates comfortably thirty thousand. Not only the bathing-establishment, but the Casino, the theatre, and the drives are thronged by English-speaking visitors. There is a strange feeling about the place, begotten of the knowledge that nineteen out of twenty persons are sojourners, which is my case, for I am in charge of a pharmacy where, instead of idling over the half-dozen prescriptions which is the

out-of-season allowance, we are hard at work from morn till dewy eve. Fortunately our pharmacy is a simple matter, the *répertoire* of drugs being remarkably limited, because the treatment is hydro-thermal rather than pharmaceutical. We do not stock temperature-charts or even clinical thermometers, there being no demand for such things: nor do we indulge in "photographic extras," which are left to the nomad photographer—in fact we are simply and purely and exclusively high-class pharmaeists with pockets to be filled.

It is astonishing what a number of acquaintances one meets in this *vu et vient* town. Every day some face peers at me over the counter, beaming with a look of recognition, fresh from distant parts and buoyed up with the prospect of seeing dear old grimy London in the course of the next few days. Whom should I meet strolling down the rue des Bains the other day but the floridly genial Mr. Michael Carteighe, with a bearing that betokened perfect self-possession and appreciation of the brilliant throng through which he was picking his way. There was a little more of the hail-fellow-well-met about him than on sundry previous occasions when he has, metaphorically speaking, put on the black cap after listening to what I had to say on more or less irrelevant topics. I gathered that he was not here for his health, which indeed did not appear to leave anything to desire, but was merely having a little holiday.

Every morning, starting at 5 A.M., sees the procession of *chaises à porteurs* conveying rheumatic subjects to the baths. One has not even the mournful satisfaction of looking at their occupants, their anonymity being preserved by curtains of striped chintz. The business goes on merrily all day long, and some idea can be formed of the "business" when I mention that in the height of the season the 200 *doucheurs* manage to administer a thousand baths and douches during the day, the baths being "alimented" by some 4,000,000 litres of sulphurated water which issues from the springs at a temperature of 105° to 110° F. The specialty of the Aix system of hydrotherapy is massage under water—that is to say, two sturdy ruffians take possession of you, and while one directs a current of hot water upon you under considerable pressure, the other pummels and thumps you until you or they are tired. There are accessory services, hot-vapour baths, local and general, enteroclystic rooms where the intestines are systematically irrigated, and others where the same intimate attention is devoted to the other receptacles and apertures of the human body. Then, too, there is a Zander Institute, where stiff joints are "broken in" by the aid of numerous mechanical appliances, and strength restored to degenerate muscles—where the flabby heart is given tone, and the lungs are "blown out" *sec. art.*

There must be something in the "cure," for almost without exception the patients declare that they feel "vastly better" at the expiration of their three weeks' watery tribulations—well enough, in fact, to hobble down to the Casino and risk what cash remains after they have discharged their hotel-bills and have settled with the bathing-authorities, doctors, and chemists.

Colonial and Foreign News.

A ROLLING PHARMACY.—A telegram from Kharbin to the "Novoy Vremya" states that the travelling pharmacy for the Russian army is about finished. It consists of four wagons, and as soon as they have been fitted out, they will be sent on to Liao-yang, thence to accompany the army as required.

SPANISH CUSTOMS-TARIFF.—The Customs-tariff prepared by the Customs Committee provides for an *ad valorem* duty of 1 per cent. on natural products, of 5 to 15 per cent. on products similar to those of Spain, and of 20 to 50 per cent. on industrial products, *plus* 50 per cent. to protect national manufactures.

A SLIGHT BUT DESTRUCTIVE FIRE.—The "Bollettino Chimico-Farmaceutico" reports a fire on June 2, at nineteen o'clock (7 P.M.), in the co-operative Chemico-Farmaceutical Alliance of Turin, which, owing to the absence of wind, was limited to a small area. Nevertheless heat and smoke almost totally spoilt the contents of the vast establishment, which was insured.

PRIZE IN CHEMISTRY.—A prize of 1,200m. (60l.) is offered by Professor Van 't Hoff, of Berlin, for a collection and systematic arrangement of the entire literature with reference to catalytic phases. Competitors are requested to forward their work up to June 30, 1905, to the *Zeitschrift für physikalische Chemie*, of Leipzig.

Canadian Notes.

(From our own Correspondent.)

THE WILL OF JOHN LYMAN. of the wholesale drug-firm of Northrop, Lyman & Co., Toronto, Rochester, and Syracuse, who died two months ago, leaving an estate of nearly a million, was admitted for probate on June 7. Toronto charities, hospitals, and colleges are left \$85,000, and those of Syracuse \$70,000. The succession-duties amount to \$26,000.

QUEBEC RETAIL DRUGGISTS.—The annual meeting of the Society of Retail Druggists of Quebec was held in Laval University, Quebec, on June 14. Considerable discussion took place on the future of the Society, and the feeling of all present was that more energetic measures should be taken to ensure its success. Mr. Henry Miles advocated the formation of a Dominion Retail Druggists' Association similar to that existing among the wholesale druggists of the Dominion. The following office-bearers were elected by ballot: President, Mr. Edmund Giroux, jun., Montreal; First Vice-President, Mr. M. Albert; Second Vice-President, Mr. T. R. Goulden. Executive board: Messrs. R. W. Williams, Three Rivers; Victor Levesque, H. R. Gray, J. E. Tremble, E. J. Nadeau, F. L. Woolley, J. G. A. Fillion, and Oliver Bowler, Montreal. Secretary-Treasurer, Mr. E. Muir.

PHARMACEUTICAL ASSOCIATION OF QUEBEC.—The annual meeting of this Association was held in Laval University, Quebec City, on June 15. A goodly number of Montreal and Sherbrooke chemists were present—in fact, it was one of the most successful annual meetings held in the ancient capital. The Registrar's and Treasurer's statements were submitted and adopted, both proving very satisfactory. The election of the new Council was then proceeded with, and the scrutineers, having counted the ballot-papers, pronounced that the following gentlemen were duly elected: A. E. Duberger, Waterloo; E. Dubi, Quebec; Alex. B. J. Moore, Joseph Contant, H. R. Gray, and S. Lachance, all of Montreal. These, with Messrs. Tremble, H. Willis, E. Giroux, R. W. Williams, A. J. Laurence, and W. H. Chapman (who have not completed their term), will constitute the Council of the Association for 1904-5. The election of officers will take place at the July meeting, which will be held in Montreal, when Mr. S. Lachance will resign the presidency, having occupied the chair for six consecutive years, during which term he has earned the esteem and gratitude of his *confrères* for his untiring zeal and devotion to the interest of the Pharmaceutical Association.

MONTRÉAL DRUG CLUB.—The recent efforts on the part of the drug-clerks of Montreal to establish a centre for commercial and scientific intercourse has been realised. They have secured excellent premises over the Western branch of the Bank of Montreal in St. Catherine Street. The inaugural meeting was well attended by all members of the trade, and great satisfaction was expressed with the work of the committee who had the matter in hand. Mr. H. Ryan (President) declared the meeting open, and Mr. W. H. Chapman (Vice-President) spoke of the future of the Club in encouraging terms. He was followed by the Second Vice-President, Mr. Hercule Barre, who addressed the meeting in French, stating in the course of his remarks that if both the French and the English were to amalgamate and fraternise in a way that they had never done before it would be to their mutual profit and pleasure. The meeting was then addressed by Mr. T. H. Wardleworth, of Evans & Sons (Limited), who, speaking as an old officer of kindred associations, emphasised the importance of unity among the members and the necessity of providing varieties of interests for the younger members, and developing their intellectual as well as their commercial qualities. He also referred to the possibility of combined action among the wholesale, retail, and manufacturing interests for the possible check of the "cutting evil." The meeting was also addressed by Mr. J. W. Knox, Mr. J. A. Dyke, and Mr. J. Wright. Mr. John Lorimer, of London, was present as a guest. An excellent programme of vocal and instrumental music was rendered, and refreshments were served.

Pharmaceutical Society of Great Britain.

DISTRIBUTION OF PRIZES.

QUIET a pleasant little function took place at 17 Bloomsbury Square, W.C., on June 29, on the occasion of the distribution of the prizes gained by the students of the School of Pharmacy.

There were about a hundred persons present, a third of whom were of the gentler sex. The meeting was presided over by Mr. R. A. Robinson, the newly appointed President, and he was supported by Mr. Rymer Young (Vice-President) and the School professors. The Council was represented by Mr. Gibson, Mr. Hills, and Mr. Harrington.

The PRESIDENT opened the proceedings by welcoming the students and their friends, and, alluding to the change of time in making the distribution, said the new plan of awarding the prizes at the end of the school session instead of in October had met with approval from all quarters.

Letters of apology were received from Sir Wm. Collins, Sir Dietrich Brandis, Mr. F. Hanbury, Mr. Harwood Lescher, Colonel Probyn, Mr. G. T. W. Newsholme, Mr. S. R. Atkins, Mr. C. B. Allen, Mr. C. J. Park, and Mr. Frank Rogers; Sir Wm. Collins mentioning that in his student days he had found the museum of great advantage to him.

The Dean of the school (Professor Greenish) then read his report on the school. The session now terminating was, he said, in every respect a prosperous one to the school. The increase in the number of students was an indication that those preparing for examination desired not the minimum of requisite instruction, but such a course as would be of service to them in after-years. The regularity of attendance and energy with which the students carried on their work were decidedly encouraging, as, however complete a course of lectures might be, they were of little avail unless the students worked accordingly. At the end of each course every student was encouraged to present himself for examination—there was no system of selection. Of those who presented themselves for the Minor examination 72 per cent. were successful, while the total percentage of passes of the whole of the Minor candidates from Great Britain was but 28 per cent. In the Major examination the percentage of passes from the school was 70, the same as last year. These figures prove conclusively that after a proper course of tuition a student is quite justified in expecting successfully to pass his examination when he presents himself. For the Council prizes nearly the whole class entered, and among the prize-winners were several women-students. The list of awards was as follows :

ELEMENTARY COURSE.

Chemistry.—Bronze medal, Joseph M. Treneer; certificates of honour, George M. J. Cole and Charles H. Warner.

Practical Chemistry.—Bronze medal, Charles H. Warner; certificates of honour, George M. J. Cole and Ellis W. Evans.

Botany.—Bronze medal, George M. J. Cole; certificates of honour, George Naylor, Thomas E. Tawell, and Irving P. Moffatt (equal).

Materia Medica.—Bronze medal, George M. J. Cole; certificates of honour, Irving P. Moffatt and Flora A. Goodwin.

Pharmacy.—Silver medal, George Naylor.

ADVANCED COURSE.

Chemistry.—Silver medal, Frederick G. C. Walker; certificates of honour, Margaret I. Bedell and Hilda B. Caws.

Practical Chemistry.—Silver medal, Alfred Wade; certificates of honour, Frederick G. C. Walker and Hilda B. Caws.

Botany.—Silver medal, Frederick G. C. Walker.

Materia Medica.—Silver medal, Frederick G. C. Walker; certificates of honour, Arthur S. Clarke and Margaret I. Bedell.

Professor Greenish then went on to enumerate the successes of past students and the changes in the school staff. The former were the obtaining of the B.Sc. (Lond.) degree by Mr. H. Deane and the A.I.C. by Mr. C. E. Male. The staff of the school had been changed through Mr. Bennett, Dr. Drabble, and Mr. H. Deane obtaining

other appointments. Mr. J. T. Cart, Mr. F. G. C. Walker, and Mr. C. S. Hill are their successors in the departments of pharmacy, chemistry, and botany. Reference was next made to the liberality of the Council in granting a room for the use of the women-students, and the hope was expressed that the men-students might soon have a common-room also—a remark which brought forth a volley of applause from the assembled students. The continuance of research and study by past students was evidenced by the contributions to various journals. The Dean finished by the remark that, prosperous as the past session had been, there are indications that the next session will be as prosperous or more so.

The PRESIDENT then made the awards, the women-students coming in for many rounds of applause as they stepped forward to receive their prizes. Mr. Walker, with his three silver medals, was the *pièce de résistance* of the proceedings, and the welcome he received was a measure of his popularity. The Hanbury gift of books was also made to each of the silver medallists.

The PRESIDENT next gave a short address to the students, conjuring them to keep a warm place in their hearts for their *alma mater*. The students who had not taken prizes were reminded that it was not always the prize-winners that make the greatest success in life. The Council spared no efforts to provide the best talent that could be obtained as professors, and the professors in their turn spared neither time nor money in imparting instruction to the students. The Council did not pretend to conduct the school on commercial lines, their first aim being efficiency, so that students might have the very best education it was possible to obtain. That the students received a sound education was obvious from the percentages of passes in the examination, and he hoped the students also appreciated the immense advantages of being trained and taught in the premier school of pharmacy. The willingness and eagerness of the students for work was a matter of congratulation to the Society. The President then referred to his experiences at the school under Bentley and Redwood, and recalled that when the latter wished to impress a fact upon the students he used to say they were to "take cognisance of it." He (the speaker) did not know whether the present professors had any stock expressions, but he had no doubt they still expected their students to "take cognisance of the facts" placed before them. Next, referring to the new common-room for the women-students, the President said that if the Council could they would find a room for the men during the rearrangement that is taking place in the premises. He further advised all students to have a hobby, as it was an excellent thing to occupy leisure hours and refresh the mind after long business-hours. The rest of the address was on pharmaceutical politics and the present tendency to put the qualification of the seller before the qualification of the person who keeps the shop. Young men have the remedy in their own hands, and should face the problem of accepting engagements with unqualified men or doing a fatal thing for their own welfare. Finally, a reference was made to the words used by Sandford in an address to the students more than thirty years ago: "I do not look to my occupation for dignity: I take my dignity to my occupation." (Loud applause.)

Mr. Joseph Ince, in an interesting speech, referred to the professors of his day—Pereira, Redwood, and Thomson—from whom he learnt his pharmacy. He was not, however, disposed unduly to praise his own times, as is often the way with elderly people, because he knew that the students of the present day have infinitely greater advantages than were obtainable in the early days of the School of Pharmacy. He (the speaker) claimed the honour of being the pioneer in obtaining the public recognition of pharmacy as a branch of teaching in that school. Based on chemistry and botany, he contended that pharmacy is at the same time a separate department, and should stand by itself. It was on this account he was pleased to note that a silver medal for pharmacy is now awarded. Mr. Ince finished by wishing the school every success: he had seen it in all phases—with waves of prosperity, and periods of comparative adversity.

MR. WALTER HILLS proposed a vote of thanks to the President, and referred to the good times of thirty-four

years ago. At that time there were botany lectures in Regent's Park at eight in the morning, and the lady students were placed in the front row away from the other students. (Laughter.) He did not know if that was the case now or whether the students all sat together. (Laughter.) He congratulated the ladies on obtaining a reading-room, and hoped the men would not be forgotten by the Council. (Hear, hear.)

MR. BRANSON (Leeds) seconded the vote of thanks, and spoke of Mr. Robinson as a tried man of business capacity, in whom chemists trusted to guide them through the crisis now before them.

Professor GREEN supported the vote on behalf of the school staff, and then

Mr. RYMER YOUNG put the motion to the meeting, and it was carried unanimously.

The PRESIDENT, in reply, referred to the happy friendships made at the school, from which, he said, he did not exempt the ladies. (Laughter.)

The proceedings finished by an invitation to tea and an inspection of the premises.

NORTH BRITISH BRANCH.

A MEETING of the Executive was held at 36 York Place, Edinburgh, on Friday, June 24, Mr. D. B. Dott in the chair. The ASSISTANT-SECRETARY having read a statement of the order in which the business of the Executive would be conducted during the year, the meeting proceeded to

THE ELECTION OF OFFICE-PEARERS.

Mr. BOA proposed the re-election of Mr. Dott as Chairman. Mr. TOCHER seconded, and the motion was agreed to. Mr. DOTT thanked the members.

Mr. ALEXANDER STRACHAN (Aberdeen) was elected Vice-Chairman, the ASSISTANT-SECRETARY announcing that he is the senior member of the Executive.

THE LATE MR. ELIAS BREMRIDGE.

The CHAIRMAN said he had received a letter from Mr. Richard Bremridge thanking him for the expressions of sympathy on the occasion of the death of his father.

Mr. STORRAR suggested that they should record in their minutes their regret at the death of Mr. Elias Bremridge. He could remember the time when Mr. Bremridge filled very worthily a very important position in the pharmaceutical world. They were largely indebted to Mr. Bremridge for the nursing care he gave the Society in its infancy. He had the pleasure of knowing Mr. Bremridge a little, and he was a genial, interesting, kindly man, who kept up his interest in the Society and enjoyed the respect and esteem of all those who knew him.

Mr. STRACHAN seconded Mr. Storrar's motion, and said he wished to bear out what had been said. One of his earliest recollections of Bloomsbury Square was in meeting one so kind-hearted and who attended to one's wants. He did not know if he had a specially soft side to Aberdeen, but he (the speaker) never went there without getting a kindly welcome from Mr. Bremridge.

It was agreed to make a minute of the resolution and to forward an extract to Mr. Richard Bremridge.

SOME ARRANGEMENTS.

The Chairman, Vice-Chairman, the resident members of the Executive, and Messrs. Fisher, Currie, Spence, and Storrar were appointed a General Purposes Committee.

On the motion of Mr. FISHER, seconded by Mr. ANDERSON RUSSELL, the committee for the nomination of examiners was appointed as follows: The Chairman, Vice-Chairman, Messrs. Boa, Kerr, Storrar, and Tocher. Their instructions were to consider any names that might be submitted to them and report to a meeting to be held prior to the meeting of Council in November.

It was agreed that the scientific meetings for the winter session be held as usual from November to April inclusive, one of them to be held in the forenoon; and it was remitted to the General Purposes Committee to arrange the business.

The Chairman, Vice-Chairman, Messrs. Currie, Gilmour, Giles, Wilson, and Cowie were appointed delegates to the Conference at Sheffield.

THE DEGREE IN PHARMACY.

The ASSISTANT-SECRETARY read a letter from the Senatus and University Court of the University of Aberdeen stating that they had now considered the draft of the proposed regulations for a degree in pharmacy and that they generally approved, subject to certain verbal alterations in Clause 16 (Doctorate of Science). The University was prepared to take, in concert with the other Universities, steps for forming an ordinance instituting the degree on the lines of the draft regulations.

It was remitted to the General Purposes Committee to co-operate with the Board of Examiners in the matter.

POOR-LAW DISPENSING.

Mr. SPENCE brought under notice the proposals by the Local Government Board for the appointment of medical officers to practise and dispense medicines in poorhouses. He thought the question too elaborate for the Executive to take up that day, and suggested that it should be remitted to the General Purposes Committee. This was agreed to, and it was arranged that the inquiries to Local Secretaries in Scotland should include the Postmaster-General's appointments in connection with post-offices, the dispensing examinations in connection with medical missions, and army compounding.

THE OCTOBER EXAMINATION.

The ASSISTANT-SECRETARY read a letter from Professor Bower intimating that it was now quite certain that he would not be able to take part in the October examination. This would have been his last examination in his four-years' term. It was agreed to appoint Professor Traill, Aberdeen University, to conduct the examination in botany with the other examiners in room of Professor Bower.

MEDICAL, DENTAL, AND PHARMACEUTICAL COMPANIES.

Mr. BREMRIDGE acknowledged the Executive's resolution in regard to Sir John Tuke's Parliamentary return of medical and dental companies, and the following letter addressed to Sir John by Dr. George Coull was read by the ASSISTANT-SECRETARY:

DEAR SIR,—At a meeting of the Executive of the North British Branch of the Pharmaceutical Society of Great Britain, held at 36 York Place, Edinburgh, on Friday, attention was directed to the order for a return showing the number of companies registered under the Companies Act, 1862, for the purpose of carrying on medical and dental practices, which was passed, on your motion, in the House of Commons on Wednesday, June 15. You are probably aware that the King's Bench Division judgments in the cases of O'Duffy *v.* Jaffe, Surgeon-Dentists (Limited) and the King (Rowell) *v.* Registrar of Joint-stock Companies, which are the occasion of your motion, are founded on the prior judgment of the House of Lords in the case of the Pharmaceutical Society of Great Britain *v.* London and Provincial Supply Association, which was decided in July, 1880. That decision was founded on the view that a company, not being a person within the meaning of the Pharmacy Act, 1868, could not be prosecuted for selling poisons or keeping open shop for the retailing, dispensing, and compounding of poisons, or for using the title pharmaceutical chemist or chemist and druggist. In short, companies are in precisely the same relationship to the Pharmacy Act as they are to the Medical and Dental Acts. I am a pharmaceutical chemist, a member of the Pharmaceutical Society, and a member of the Board of Examiners in Scotland of the Pharmaceutical Society. I am also a Doctor of Science of the University of Edinburgh, and have the honour of being one of your constituents in the Parliamentary representation of the United Universities of Edinburgh and St. Andrews. In these circumstances I have been requested by the Executive of the North British Branch to approach you with a view to securing your consent to an extension of the return ordered by the House of Commons so that the last clause of your motion might read "for the purpose of carrying on medical, dental, and pharmaceutical practices." I would respectfully bespeak your favourable consideration of this request, and it will be a great obligation if you can kindly take what steps may be necessary to obtain the consent of the House to the proposed extension of the scope of the return.—I am, &c.

The Assistant-Secretary stated that there had not been time for an answer to the letter.

Mr. GILES expressed the desire to have in the return

specification of companies whose directors are unqualified, and stated that there are partnerships in Scotland which include such unqualified persons.

The ASSISTANT-SECRETARY explained that there is no means of scrutinising the qualification of the individual shareholders in such companies as Savory & Moore. All they could get by a Parliamentary order was a return from the Registrar of Joint-stock Companies giving the names of all the companies on his books carrying on the business of chemists and druggists. When they got that return, they could then proceed to make any inquiries they liked into those whose names were on the list of shareholders. Mr. Giles's motion as passed covered all he had in his mind.

The subject then dropped.

MR. J. P. GILMOUR

gave notice that he would propose the following motion at the October meeting of the Executive :

That the Executive respectfully recommend to the Council the expediency of including in the next Pharmacy Bill provisions to the following purport :

(1) That statutory authority be conferred on the Council to exercise disciplinary powers over all persons on the register of chemists and druggists who are found guilty of infamous conduct in a professional respect, and to inflict penalties ranging from temporary removal of the offender's name from the register, with concurrent suspension from the practice of pharmacy, to permanent erasure from the register.

(2) That an assistant's qualification be instituted *mutatis mutandis* on the lines indicated, and for the purposes specified, in the Pharmacy Act (Ireland) Amendment Act, 1890, Section 19.

This Executive further respectfully suggest the advantages of emendation of Section 6, Clause 1, of the by-laws of the Society as under: "The Council shall meet in the Society's house in London or Edinburgh quarterly, each quarterly meeting to open on such day, hour, and place as the Council may from time to time decide."

UNMINERALISED METHYLATED SPIRIT.

MR. J. ANDERSON RUSSELL (Greenock) brought under the notice of the Executive the fact that doctors in the West are prescribing unmineralised methylated spirit for their patients, to be used for bathing in cases of bedsores, &c. The practice has arisen through the use of such spirit in poorhouses, which are able to get it for the purpose of making liniments. A general conversation ensued, in the course of which the law of the matter was fully explained, and it was mentioned that a penalty of 200*l.* is incurred for selling the spirit by retail and using it for any other purpose than that for which it has been granted. Mr. Russell expressed himself as being aware of this, he having had a conversation with the local supervisor about it, but prescribers are anxious to get the spirit for their patients; and as he considered that the public should have equal privileges in the matter with the inmates of poorhouses, he has been in communication with the Excise Department at Somerset House about the matter, but the authorities had not realised the drift of his inquiry up to the time he spoke. Mr. Dore agreed with Mr. Russell that the matter should not be dropped.

This was all the business, and the meeting terminated.

Personalities.

MR. T. J. McDIARMID, principal of Messrs. McDiarmid & Co., manufacturing chemists, Melbourne and Sydney, is now in London on a business-visit.

MR. A. G. ATKINSON, of Trinity College, Cambridge, son of Mr. J. E. Atkinson, pharmaceutical chemist, Upper Norwood, S.E., has obtained a first class in the Natural Science Tripos.

MR. THOMAS TYRER, F.I.C., F.C.S., has been awarded the silver medal of the Society of Arts for his paper on "The Need of Alcohol for Industrial Purposes," read to the Society on April 27.

MR. W. B. CROOKE, pharmaceutical chemist, of Mr. Chur's staff at Hobart, Tasmania, arrived in London the other day. He is on a health-seeking trip, and is making his first acquaintance with the Old Country.

MR. W. R. MACKAY, senior Scottish representative of

Messrs. Armour & Co., Chicago and London, is next month visiting the United States on a pleasure-tour, including a visit to the headquarters of his firm at Chicago.

THE MAYOR OF ST. PANCRAS (Alderman T. H. W. Idris) has been officially invited to meet the Prince and Princess of Wales on the occasion of the laying of the foundation-stone of the new Working Men's College in Avondale Road, St. Pancras, on July 16.

SIR WILLIAM TURNER, K.C.B., is, according to the "British Medical Journal," to resign the presidency of the General Medical Council at the November Session. Dr. Donald MacAlister (Chairman of the Pharmacopœia Committee) and Dr. Pye-Smith are suggested for the vacancy, but an Irish member may also be put forward.

DR. FRANCIS A. BAINBRIDGE, son of Mr. R. R. Bainbridge, President of the Teesside Chemists' Association, has again distinguished himself. The thesis, which he submitted for the degree of M.D. Cambridge, "The Adaptation of the Pancreas," has been adjudged to be the best of the year, and the author thus secures the Horton-Smith prize. Dr. Bainbridge's career has been one of uninterrupted success. Passing from the High School of Stockton-on-Tees at the age of thirteen with a three-years' scholarship to the Leys at Cambridge, he made such good use of his time at the school that in 1893 he won an open scholarship at Trinity College. While there he took his B.A. and London B.Sc., together with part of his M.B. degree, finally going to St. Bartholomew's in 1897 as Schuter Scholar. While at the famous hospital he was house physician, demonstrator in pathology, and casualty surgeon. He is now M.R.C.S., D.Sc. (London), and M.D. (Cambridge).

MR. A. R. G. CLARK, who during the past thirteen years has been on Messrs. North & Rae's staff at Yokohama (latterly as manager and secretary), was honoured by his fellow-countrymen before leaving Japan, on May 11, to make his home in London. In Yokohama Mr. Clark was an active member of the St. Andrews Society, and as a Freemason he filled practically every office, and followed several illustrious predecessors as chairman of the Grand Consistory of Japan.

On May 10 the brethren met and presented Mr. Clark with a solid silver loving-cup, suitably inscribed, as a token of their esteem and as a remembrance on the occasion of his departure. An illuminated address was presented with the cup. Mr. Clark, we may add, was apprenticed to Mr. William Allan, of Dumfries, and, thereafter, had experience as an assistant in Belfast, later going to Dublin, where he joined the staff of Butler's Medical Hall, Lower Sackville Street. Whilst there, in 1889, he took the Licence of the Pharmaceutical Society of Ireland, and six months later passed the Minor examination of Great Britain, so that he is qualified to practise in any part of the United Kingdom. We understand that Mr. Clark thinks London is big enough for him.

PROPRIETARY MEDICINES IN ITALY.—With the object of decreasing imports of foreign proprietary medicines, the second edition of the Italian Pharmacopœia contains formulas for specialities. There is great dissatisfaction among Italian pharmacists at this introduction. They maintain that the home proprietary-medicine trade has gained the upper hand in Italy, and they suggest that the section should be omitted from the next edition of the Pharmacopœia.



The B.P.C. in Sheffield.

CHIEFLY REMINISCENT.

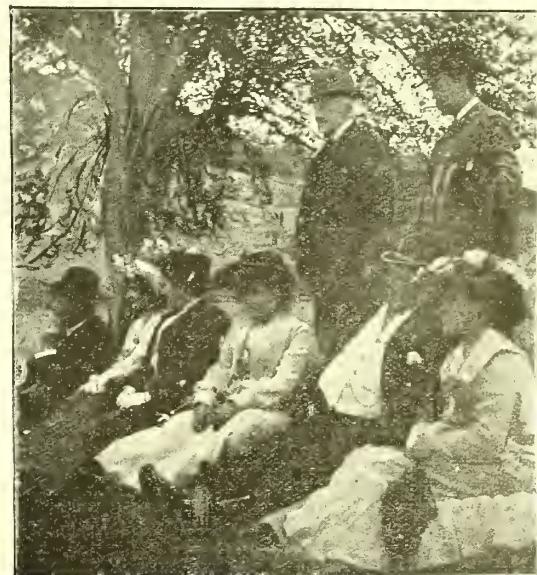
THERE are, no doubt, still a number of members who remember the last visit of the British Pharmaceutical Conference to Sheffield, in 1879, and there are also a few of the Local Committee left to entertain us with their recollections of that visit. The President of the committee, Mr. Wm. Ward, lived until a few months ago; several others who took an active part in the arrangements are now living in retirement, but the only member of the 1879 committee who is on the 1904 one making the arrangements for August next is Mr. Newsholme. Mr. H. W. Maleham, the Hon. Secretary of 1879, has deserted pharmacy for commercial life, and by a curious coincidence is at the present time residing in the house formerly occupied by his immediate successor in business, Mr. Albert Elliott, to whom the Hon. Secretary of the present Conference Committee was apprenticed. The 1879 programme for the entertainment of the visitors was practically the same as this year, but the arrangements were not nearly so elaborate, the Conference having since grown considerably in importance if not in numbers.

Although he had at that time been in Sheffield for only two years, Mr. Newsholme was appointed Treasurer to the Local Committee, and, a list of possible subscribers having been prepared, it was suggested to him that he should call upon them. There were in the town at that time a good many veterans of the old school, and Mr. Newsholme told some good stories of his adventures in search of subscriptions to a *C. & D.* representative who called upon him the other day. There were one or two of these veterans whom Mr. Newsholme, as a newcomer, did not know, as they confined their attention to their businesses and took no part in local pharmaceutical affairs. One of these was John Gartside Elliott (known as Little Elliott), who was the youngest son of Ebenezer Elliott, the Corn Law rhymer. Mr. Newsholme called on old Fretwell Hudson, commonly known as the "Cow Doctor," who was a Guardian of the Poor, and who had promised to take him along to see Elliott. He found the old gentleman with a big apron tied all round his body, busy sweeping the flagstones in front of the shop. He explained that he was doing this to keep warm as he was not well, and sent his visitor on alone to tackle the lion in his den. Mr. Newsholme was extremely doubtful whether he would get anything for his trouble, but went on to Gibraltar Street, where he found Elliott's shop in its usual state of semi-darkness owing to the shutters being up. The place was piled with hampers of drugs, from the shop-door into the passage, and forward into the kitchen, leaving merely a narrow passage for numerous customers and patients to stand in: he had a tremendous prescribing connection. Mr. Newsholme went in and found the shop packed with women, all waiting with patience for the great man to see them, which he did in rotation—when he was ready. After Mr. Newsholme had waited for about ten minutes, during which time there was no sign of the owner, one of the women asked him if he wished to see Mr. Elliott, and volunteered to fetch him out. She disappeared into the burrow at the back of the shop, and after a still longer wait Elliott came out, in his usual dress—a tall hat, pair of black spectacles, frock-coat, and big apron tied all round his body underneath the armpits. "What does tha' want?" he asked. Mr. Newsholme explained his mission. "Tha' shouldn't come to poor folk," he said, and on his visitor saying he had not intended to do so, the old man asked to see the subscription-book which Mr. Newsholme had under his arm. He then disappeared into the rear, and after a further wait of about ten minutes, he turned up again, and handed over a cheque for two guineas. On being thanked for this he said he thought the Conference was doing very good work, which he was glad to help forward. As the old man appeared to be very busy, Mr. Newsholme took his leave, and after some trouble succeeded in working his way through the crowd of women into the street. It was no uncommon thing for these women to wait outside the shop all day on these occasions when the old man did not trouble to attend to business, and no matter how big a crowd was waiting at

dinner-time he would toddle off to his dinner, and they had to wait until he had finished.

Another interesting old character Mr. Newsholme tells of, was J. T. Miller, who also wore a tall hat continually; indeed, it was popularly reported that it remained on his head until after he had got into bed at night, and was donned before he turned out in the morning. He had the black coat and big apron which seem to have been the "correct thing" in those days. Mr. Newsholme describes him as being a gentleman—perfect in manners, in bearing, and every other way. He had studied for the medical profession, but owing to a serious illness had been obliged to give it up, and he consoled himself by enthusiastically devoting his time to scientific work. He invented the test for methylated spirit in tinctures, known to this day as Miller's test. This old gentleman was a chemist of the highest order, a microscopist, an astronomer of no mean attainments, and, in general, one whom his country should have delighted to honour, but owing to his excessively modest and retiring nature he had practically no reputation outside the intimate circle who had an opportunity of knowing his work. Although he seldom went out of his house, he was, right up to the day of his death, thoroughly up to date in the latest details of organic chemistry and other subjects in which he took an interest.

Another interesting reminiscence of the Conference, to which Mr. Newsholme did not allude, is the memory which one old pharmacist has of Mr. Newsholme occupying the rear seat on the conveyance, on the day of the excursion, with the lady to whom he was engaged, and who is now Mrs. Newsholme. It rained that day, rained hard, but the occupants did not mind it much. It seems but yesterday, too, since this photograph was taken.



There are a few familiar figures in it. A smiling Mr. S. R. Atkins stands behind Mrs. Newsholme, a second edition of whom sits at her father's side on the left. This picture is unique in so far as it shows the two provincial ex-Presidents of the Pharmaceutical Society together.

THE PINK CIRCULAR

which the Local Committee is issuing to the members of the Conference bears on the front page a group of the principal buildings in Sheffield, with the arms of the city and of the Cutlers. It is a larger circular than usual, and, in addition to the programme, gives pithy paragraphs about the arrangements, the town, and the district. The following is the—

PROGRAMME.

Monday Evening, August 8.

8.30 p.m.—Reception by the Lord Mayor and Lady Mayoress (Mr. and Mrs. J. R. Wheatley), at the Town Hall, with music and refreshments.

Tuesday, August 9.

10.0 A.M.—Opening of Conference in the Lecture-hall, University College. Address of welcome by the Principal, Dr. Hicks, F.R.S. President's address.
Reception of delegates. Reports, followed by reading and discussion of papers.
1.0 P.M.—Luncheon at Royal Victoria Hotel.
2.0 P.M.—Conference session resumed at University College. Reading and discussion of papers. Inspection of electroplate and cutlery works—Messrs. Mappin & Webb, Walker & Hall, and Joseph Rodgers & Sons (Limited).
4.30 P.M.—Afternoon tea at Montgomery Hall.
8.30 P.M.—Dance and smoking-concert at Royal Victoria Hotel.

Wednesday, August 10.

10.00 A.M.—Sessions of Conference resumed. Reading and discussion of papers.
10.30 A.M.—Drive for ladies, and inspection of works.
1.0 P.M.—Luncheon at Royal Victoria Hotel.
2.0 P.M.—Sessions of Conference resumed and enlarged. Reading and discussion of papers. Place of meeting, 1905. Election of officers.
4.0 P.M.—Afternoon-tea at Montgomery Hall.
4.45 P.M.—Visit to works of Messrs. Cammell, Laird & Co. (Limited), by special tramway cars from Fitzalan Square.
9.30 P.M.—Concert, Royal Victoria Hotel.

Thursday, August 11.

9.0 A.M.—Drive from Royal Victoria Hotel by Fox House, Froggatt Edge to Baslow, visit Chatsworth Park by private entrance, inspection of Chatsworth House, the seat of the Duke of Devonshire.
1.30 P.M.—Luncheon at the Peacock Hotel, Baslow.
2.30 P.M.—Proceed to Haddon Hall.
4.0 P.M.—Drive to Bakewell, where a halt will be made for visitors to view the church.
5.30 P.M.—Tea at Peacock Hotel, Baslow.
7.50 P.M.—Return to Sheffield by Owler Bar.

Notice to Members of Local Pharmaceutical Associations.
Friday, August 12.

9.45 A.M.—Annual Meeting of the Federation of Local Associations at the Royal Victoria Hotel.

HOTELS.

The Royal Victoria Hotel, Sheffield, will be the headquarters of the Conference. Accommodation has also been reserved in the other principal hotels.

TARIFFS.

To include bed, breakfast, and attendance—			
Royal Victoria Hotel...	Single bedroom	7/6	Double 13/6
King's Head Hotel ...	"	6/6	12/3
Black Swan Hotel ...	"	6/0	12/0
Imperial Hotel...	"	6/0	12/0
Royal Hotel ...	"	6/0	11/0
Albany Hotel (Tempor- ance) ...	"	5/0	10/0

RAILWAYS.

Sheffield is easy of access from all parts of the country by the Midland, Great Northern, and Great Central Railways, visitors to the Conference being booked return at a fare-and-a-quarter rate on production of a certificate signed by the Hon. Local Secretary (Mr. Herbert Ancliffe, Union Offices, Westbar, Sheffield) from August 6 to 15.

TICKETS FOR THE CONFERENCE.

Book No. 1 will cover the programme for Tuesday and Wednesday, price 10s. 6d. each.

Book No. 2 will cover the programme for Thursday, price 10s. 6d. each.

The Local Committee's notes on Sheffield tempt us to refer to the possibilities of

A HOLIDAY IN THE DISTRICT.

We have noticed at past Conferences that a goodly proportion of the members kill two birds with one stone by devoting themselves for a week to the progress of pharmacy (including a certain amount of devotion to its fair daughters), then seeking their annual supply of recuperation in the neighbourhood of the meeting-place. Now, whatever claims Sheffield has to recognition, we do not suppose that it has ever been seriously put forward as a holiday-resort, far less one for health-giving. Nevertheless, pharmacists who are looking out for a change from the stereotyped sojourn at the conventional watering-place might do worse than spend their vacation in explor-

ing the beautiful surroundings of the city of armour-plates, big guns, and smoke. The suburbs of Sheffield are second to none in the country for beauty and romantic interest, and as a centre for excursions the place takes some beating. Owing to Sunday being considered a *dies non*, the tickets issued to visitors to the Conference extend from Saturday, August 6, to Monday, August 15, inclusive, so that there will be opportunities to look round the district without interfering with the arrangements for the Conference. We are informed that the Great Central Railway will be prepared to extend the time for going and returning from Sheffield, so far as their own lines are concerned, to suit the convenience of the visitors, and it will thus be open to them to take advantage of the reduced fare to use this line, within the fifty-mile radius, a pleasure.

Throughout the summer there are coaching trips into North Derbyshire from the city every day, the supply of coaches and conveyances for hire is exceedingly good, and to those who have never spent a holiday among the manifold beauties of the Peak district (the "Switzerland of England," according to Ruskin) the Conference will, owing to the admirable facilities provided, prove a unique opportunity. The places of interest include Hathersage, the last resting-place of Little John, companion of gallant Robin Hood; Eyam, with its memories and show-places, reminiscent of the terrible plague; Castleton, and the lovely dales. Within easy distance, also, is Worksop, the headquarters of the coaching for Sherwood Forest and the Dukeries, and other places, such as Buxton, Matlock, and Harrogate, where health-giving is the staple industry.

Westminster Wisdom.

(From our Parliamentary Representative)

RETAILING OF METHYLATED SPIRIT.

A good deal of interest was evinced at Westminster, amongst members familiar with the question, in the report that the Chancellor of the Exchequer is contemplating the introduction of what is known as an "omnibus" Bill to give powers, *inter alia*, for retailers to sell more than a gallon of methylated spirit at a time for motors, &c. Members who might have been expected to possess authentic information on the subject confessed, however, that they had heard nothing of any such intention on the part of the Chancellor. Colonel Sadler states that he intends to raise the question on Clause 5 of the Finance Bill, which has reference to the abatement of taxation. Mr. Scott Montague, who also takes a keen interest in everything affecting motor-cars, thinks it would be more convenient to discuss the specific question of the power of retailers on the report stage of the Bill. He believes the Chancellor of the Exchequer favours the appointment of a Departmental Committee to inquire into the whole question. There is a strong feeling that the restrictions which at present environ the sale of alcohol for industrial purposes should be removed.

CONTAGIOUS DISEASES OF ANIMALS.

Mr. Lambert has elicited some interesting statistics as to swine-fever, anthrax, glanders, and scab from Mr. Ailwyn Fellowes, representing the Board of Agriculture. I reduce these to the simplest expression, the numbers referring to outbreaks :

	1901.	1902.	1903.	1904.
Swine-fever ...	3,140	1,688	1,478	762
Glanders and farcy ...	1,347	1,155	1,456	725
Anthrax ...	651	678	767	517
Sheep-scab ...	1,557	1,664	1,833	913

The 1904 figures are for the first twenty-five weeks, except in the case of sheep-scab, where five months only are included. Swine-fever alone has cost the Board over 50,000*l.* a year during the past four years.

REVACCINATION BILL.

This measure, which was introduced into the House of Lords by the Duke of Northumberland, has passed through Committee and now awaits second reading by the Commons. It requires revaccination within six months after the age of twelve years, and applies to this the provisions of the Vaccination Acts, the "conscientious

objector" being protected. Petitions against it are arriving at the House of Commons.

WEIGHTS AND MEASURES BILL.

It is very doubtful whether this measure will make any further progress. In the present congestion of business there is no chance of the Government adopting it and making it a Government Bill, and its prospects as a private member's Bill are very remote. Should the second reading ever be reached, which is exceedingly unlikely, Mr. Herbert Robertson has given notice of his intention to move the rejection of the Bill.

THE SHOP-HOURS BILL.

This Bill as amended by the Standing Committee on Trade has now come back to the House of Commons, but no date for the report stage has yet been fixed by the Government. Mr. Balfour's statement in the House on Wednesday, indeed, is taken to mean that the Licensing Bill is to be proceeded with without interruption until the Committee stage is completed. As the Finance Bill will afterwards be taken, it is impossible to give even an approximate date on which the Shops Bill may be reached. Meanwhile notice of several amendments has already been given. The most interesting is the one which stands in the name of Sir Frederick Banbury, who has all along shown hostility to the Bill on account of the damage he believes it will inflict on the small shopkeepers. The hon. member proposes to move a new clause providing that "nothing in this Act shall prevent a shopkeeper keeping his shop open after any closing-hour fixed by the local authority: provided always that he employs no assistants after such hour." Amendments have also been put down by Mr. Macnamara and Mr. John Burns, the effect of which would be to strike out the lines in Clause 8 which provide that in London outside the City a metropolitan borough council and not the county council shall be the authority responsible for the administration of the Act.

THE TRADE OF INDIA.

Replying to Sir John Leng, the Secretary of State for India mentioned last Friday that the exports from India in 1903-4 (in tens of rupees) amounted to 155,157,000 and the imports to 84,808,000, both figures being much in advance of the three previous years, nor do they include Government stores.

NEW ABERDEEN UNIVERSITY DEGREE.

Copies of an ordinance made by the University Court of the University of Aberdeen, empowering that body to confer the degree of Doctor of Science in Agriculture—D.Sc. (Agr.)—were on June 27 laid before the two Houses of Parliament as a statutory preliminary to approval, after the expiration of twelve weeks, by his Majesty in Council. It provides for Bachelors of Science in Agriculture of the University or any recognised University, or an equivalent degree, proceeding to the doctorate, on presentation of a thesis recording original research undertaken by the candidate. Certain other conditions as to time, examination, and study are laid down.

MARRIAGES.

BADGER—HARRIS.—On June 20, at Howth Parish Church, co. Dublin, by the Rev. Canon Boyd, B.A., Kilronan, assisted by the Rev. J. Kerr, M.A., rector of the parish, Samuel Storey Badger, pharmaceutical chemist, Medical Hall, Magherafelt, to Anne Marion Harris, Main Street, Longford.

COOPER—BURROW.—On June 25, at St. James's Church, Kennington Park Road, by the Rev. S. Bache Harris, M.A., and the Rev. F. A. Rogers, M.A., Burton Frederick John Cooper, chemist and druggist, 62 Vassall Road, S.W., eldest son of the late Mr. D. Burton Cooper, to Gertrude Emily, second daughter of the late Mr. Richard J. Burrow.

CORRIGAN—NICHOLSON.—On June 15, at Fertagh, by the Rev. J. L. Dwyer, M.A., rector of the parish, Mr. William Corrigan, pharmaceutical chemist, Celbridge, to Isabella, seventh daughter of the late Thomas Nicholson, Donaghmore, Johnstown.

OSBORN—HOLTON.—At Wesley Chapel, Heeley, on June 22, by the Rev. E. J. W. Harvey, B.Sc., Arthur

Osborn to Beatrice Mary, only daughter of Mr. John Henry Holton, pharmaceutical chemist, Meersbrook, Sheffield.

PARKE—CUSHMAN.—At St. Peter's Church, New York, on June 8, Hervey C. Parke (son of the late Mr. H. C. Parke, founder of the firm of Parke, Davis & Co.), to Ethel Margaret Cushman.

PICKERING—WILLIS.—On June 23, at St. George's Church, Perry Hill, Cattford, Kent, by the Rev. Canon Muriel, Alexander Henry, only son of Alexander S. Pickering, of Catford Hill, Kent, and Dunster House, Mincing Lane, London, to Annie, youngest daughter of the late Thomas Willis, formerly of Cobham, Surrey.

TILDESLEY—COLLINS.—On June 22, at the Eastwood Wesleyan Chapel, Rotherham, by the Rev. D. Banks, Mr. Robert William Tildesley, chemist and druggist, Parkgate, Rotherham, to Clara, youngest daughter of Mr. H. Collins, of Rotherham.

Scientific Progress.

Temou-Lawa.—A root under this name has been brought into trade from Java and Sumatra which has been used there in the form of ground pulp for liver-complaints. Temou-lawa is the rhizome of *Curcuma leucorrhiza*, Roxb., whose active ingredients, however, have not yet been isolated ("Pharm. Cent.").

Vanilla containing Heliotropin.—Those species of vanilla known as vanillon or pompona (the fruits of *Vanilla pompona*) are, according to Goller ("Pharm. Central," 1904, 192), characterised by containing heliotropin as well as vanillin. There is also exported from Tahiti the fruit of *Vanilla planifolia*, which contains heliotropin. These varieties cannot be utilised as spices, but are used to considerable advantage in perfumery.

New Remedies.—Maretin is the name given by the Elberfelder Farbenfabriken to a new antipyretic, which is, chemically, a methylated antifebrin, with the acetyl group replaced by the grouping $\text{NH} \cdot \text{NH} \cdot \text{CONH}_2$. It is a white, crystalline compound melting at 183° - 184° , but slightly soluble in water, insoluble in ether, and not very soluble in alcohol. It possesses strong antipyretic properties. Intestin is a compound of bismuth, naphthalene, and benzoic acid, and is recommended as an internal antiseptic.

Dihydrolimonene.—According to Semmler ("Berichte," 36, 1033) limonene is incapable of direct reduction with sodium and absolute alcohol, whilst phellandrene is easily reduced under these circumstances; but the hydrochloride of limonene may be reduced by sodium and alcohol, keeping the temperature at 0° in order to ensure the absence of secondary products. Dihydrolimonene is a liquid boiling at 173° - 174° , of specific gravity 0.829, and refractive index 1.463, and optical rotation $+40^{\circ}$. It appears that reduction of the terpenes in general gives rise to bodies of much lower specific gravity and lower refractive index.

Citronellal Compounds.—Pure citronellal, regenerated from its bisulphite compound, was found by Rupe and Lotz ("Berichte," 36, 2796) to boil at 91° - 92° and 14 mm. pressure, and to have a specific rotation of $+12.89^{\circ}$. From it these chemists have obtained a compound with acetone of the usual condensation-type. It is a colourless oil, boiling at 142° - 144° and 14 mm. pressure; specific gravity 0.8737, and optical rotation -2.70° . It forms a semicarbazide melting at 142° - 144° and 14 mm. pressure; specific gravity 0.8737, corresponding citral compound, is a liquid boiling at 175° and 14 mm., specific gravity 0.9326, and optical rotation -6.49° . A number of compounds of this acid were also prepared and described.

Cypress Oil.—Schimmel & Co. have examined a genuine sample of cypress oil, in which hitherto only dextropinene and cypress camphor had been detected. The oil used had the following characters: Specific gravity 0.892, optical rotation $+16^{\circ}$ 5', and refractive index 1.47416. The saponification-value before acetylation was 25.3, and after acetylation 30.5. These figures correspond with the presence of 8.8 per cent. of esters as geranyl acetate and 7 per cent. of free alcohols as geranil. The following bodies were identified in the oil: furfural, dextropinene, dextrocAMPHE, dextro-sylvestrene, cymene, an unknown ketone yielding a semicarbazone melting at 177° , an alcohol which was probably Fromm's salinol, a terpene alcohol, and a series of esters containing acetic and valeric acid, together with a crystalline acid melting at 129° .

London Chamber of Commerce, Chemical-trade Section.

A MEETING of this Section was held at the offices of the Chamber, Oxford Court, E.C., on Tuesday, June 28. Mr. John C. Umney (Chairman of the Section) presided, and the attendance comprised Messrs. B. Biggs (Lister & Biggs), T. Christy (T. Christy & Co.), J. Groom (Nobel's Explosive Company, Limited), Peter MacEwan (THE CHEMIST AND DRUGGIST), E. J. Millard (C. J. Hewlett & Son), Boverton Redwood (Automobile Club), F. Shaw (G. Curling, Wyman & Co.), Henry E. Stevenson (Baiss Brothers & Stevenson, Limited), C. E. Thomson and C. Tanner (Crown Perfumery Company), T. Tyrer (Convener of the Spirit Committee of the Society of Chemical Industry), E. A. Webb (Evans Sons Lescher & Webb, Limited), and T. F. Woodfine (Society of Motor-manufacturers). The minutes having been read and confirmed, the Chairman explained the present position in regard to

UNTAXED ALCOHOL,

stating that the additions to the Joint Committee representing the Chemical-trade Section and the Society of Chemical Industry now included the names of Dr. Markell, Dr. Redwood (for the Automobile Club), the Royal Agricultural Society, the West India Committee, the Society of Motor-manufacturers, and Mr. Nicholson, representing the distillers' interests.

Dr. Bovertion Redwood said he had been asked by the Automobile Club to represent them on this committee, and he was pleased to act and to be present in that capacity.

Mr. Thomas Tyrer was then called upon by the Chairman, and said that there is a certain basis of truth in recent rumours: matters have not been shelved or withdrawn. The Chancellor of the Exchequer has had a considerable number of interviews with gentlemen who are largely interested in the application of alcohol for other than chemical purposes, from the Automobile Club chiefly, and the personal influence of the members of that Club has undoubtedly been powerfully effective in what has already been done or proposed. He ventured to express the opinion, when he took part in the discussion of the paper by Dr. Ormandy at the Automobile Club, that the Club would materially affect the ultimate solution of the difficulty as regards procuring untaxed alcohol if they could get at the powers that be. It is important to have an ally of this character, who could approach the Government from a different standpoint, so as to get them to alter their method of looking at the proposals first made on behalf of technology, and to secure the appointment of an expert committee consisting of chemists, engineers, and physicists. A unification of all interests affects this large question. It will be an effective force which is almost without parallel in similar trade affairs. Mr. Tyrer proceeded to say that he had seen Mr. Scott Montagu, M.P., who has used his influence as a motor-authority with the view to getting untaxed spirit for motor-purposes. Mr. Scott Montagu is a personal friend of the Prime Minister and the Chancellor of the Exchequer, and Colonel Sadler and he have worked together. Colonel Sadler informed him (the speaker) that there has been a large influential meeting of members of Parliament, but practically matters have been left in the hands of Mr. Montagu and Colonel Sadler. Things, however, did not move very fast, for on appeal to the Revenue, the Revenue officials said, "We are in the position of being 'pumped dry' for financial resources, and therefore we can say nothing. If the Treasury says we are to be liberal, we shall be liberal." The points raised by the Revenue are these: First, there is no denaturant equal to wood-naphtha. This, said Mr. Tyrer, is perfectly absurd from the chemical point of view, but the fact of the matter is that there is a great deal more of illicit drinking of methylated spirit than is generally supposed, and the Revenue authorities are bound to keep this in mind; and the facts which the authorities had supplied to him constituted a powerful argument against changing

the denaturing agent for spirit that is to be sold to the public. It is different as regards untaxed alcohol for manufacturing-purposes. In this case

THERE ARE IMPORTANT PRECEDENTS.

Mr. Tyrer proceeded to mention a few. The Clayton Aniline Company applied for permission to use 100 gals. of rectified spirit, which they proposed to denature with 3 per cent. of pyridine. It was to be used for experimental purposes, but the Excise authorities declined. The case of universities and colleges getting up to 50 gals. of alcohol duty-free for research was cited, no questions being asked in that case, but the Excise practically said to manufacturers, "We will not allow you to have it for experimental purposes, however well it is guarded in your laboratory." It seemed to him difficult to understand why obnoxious pyridine should be objected to as a denaturant, but it seems that its basic nature renders it easy of removal, and the Excise are ever watchful of danger to the revenue. Again, when he came to look into the matter he found that the practice of drinking denatured spirit is so common that it is impossible not to recognise the probable result of placing such spirit in the way of chauffeurs, and Excise experience favours the present method of denaturing. He believed that all these matters would be cleared up, and that there would be a considerable concession in the direction of quantities allowed to be sold. At present retailers cannot sell more than 1 gal. at a time, which is too little for motorists. Coming next to the exact position of duty-free spirit for manufacturing-purposes, Mr. Tyrer said no move has been taken in the direction of what was intended by Mr. Biggs in his remarks, at the Society of Chemical Industry and the Society of Arts, as to rebate on exportation. He remembered that some time ago the Chairman referred to the ease with which this rebate principle could be applied for industrial purposes—that is to say, the Revenue had only to regard all spirit exported or used in manufacture as being

"ON THE HIGH SEAS."

a graphic description due to Mr. Nicholson, and so extend to it all the rebate of 3d. per gal. at present only allowed when it is sent out of the country. In connection with this it might not be generally known that the position of distillers and rectifiers is most closely guarded by the Revenue authorities. The enormous financial interests involved have led to the Excise forbidding a rectifier being under the same roof or even in the same street as a distiller, and in all cases spirit sent from a distillery to a rectifier must pay full duty before it is removed, although the distiller and rectifier may be one. Mr. Tyrer instanced this as an example of established revenue-guarding practice which cannot be changed without powerful national reasons, and, inferentially, such practice stands in the way of any new scheme for removing the tax from spirit for certain legitimate purposes. But, he continued, all indications go to show that the authorities are willing to allow more freedom in the use of the present denatured spirit, especially for motor-purposes.

A PETITION TO THE CHANCELLOR OF THE EXCHEQUER has been drawn up and signed by many members of Parliament, and it has been presented to the Chancellor by Mr. Scott Montagu. This embodies three suggestions, viz.:

1. That the law should make it possible to obtain alcohol free of duty.
2. That such alcohol should be allowed to be sold in larger quantities than 1 gal. at one time.
3. That the differential duty of 5d. per gal. on all imported raw spirit should be reduced to 3d. or 3½d.

Mr. Tyrer remarked that it would be remembered that Mr. Nicholson, on behalf of the distillers, had said that about 3d. of differential duty would cover their interests as regards compensation for fiscal supervision. The petition further suggests that the Chancellor should give such concessions as are possible this year, and appoint a Departmental Committee to inquire into the matter. The Chancellor replied that he agreed with Suggestions 1 and 2, and as regards Suggestion 3, he thought the distillers would be content with the 3d. drawback. Mr. Tyrer has since been informed that the Chancellor of the Exchequer

is bringing in an omnibus Inland Revenue Bill, in which there will be a clause to alter the Treasury Minutes (or, rather, Section 126, &c., of the Spirits Act, 1880) as to the supply of methylated spirit. Mr. Tyrer then proceeded to refer to the attitude of the Excise authorities on this matter, and said he believed they would hail with satisfaction any extension of privileges that would embrace the general interests of manufacturers. On the whole, therefore, Mr. Tyrer considered that the spirit question has by recent developments materially advanced, and he felt that freer use of untaxed alcohol for manufacturing-purposes, and a more liberal range of denaturing-agents, are, in the light of past experience and present practice, a mere question of time. He felt that this Section of the Chamber should take steps to have the views of manufacturers placed before any Departmental Committee which might be appointed.

FURTHER DISCUSSION.

The Chairman said they could not very well make any further move until they heard the decision in regard to the Departmental Committee. He therefore suggested that they should pass this motion :

That the Chancellor of the Exchequer should appoint a Departmental Committee which would represent all scientific and manufacturing interests.

Mr. B. Biggs asked how the tax-free spirit is to be distributed among the consumers and the Revenue protected at the same time. One man would want a hundred gallons and another a thousand gallons, and it would be impossible to speak to all the employés in order to prevent them drinking it. It would not pay the general run of wholesale druggists to apply for the tax-free spirit, as the concession would be outweighed by the cost of the Inland Revenue officers. If something cheaper than wood-naphtha was found, wood-naphtha would be used for other purposes. In the United States they manufactured some five million gallons per annum, whereas formerly he (the speaker) was a large shipper to the United States.

Mr. Tyrer said he had received a letter from Dr. Wiley in which he gave the whole history of the spirit-legislation in the United States. The trouble there was entirely due to the denaturing question. He had given the Excise copies of translations of the German and French regulations in regard to spirit in factories and the mode of stock-sheets. He had also given them the American regulations, which were now formulated on the continental method. He pointed out what other countries were doing, but the Excise said, "What about the 11s. duty as against 1s. 6d.?" Another point they raised was the question of magnitude, and in this connection it looked as if the Government intended that there should be a syndicate of industries. They regard the 11s. duty as a serious matter. Ether-drinking in Ireland appeared to have completely upset the authorities, and he could not help sympathising with their position. Dr. Redwood, the speaker said, had suggested that as the term "untaxed" had lately been adopted, it would be better to adhere to that word.

The meeting then adopted the Chairman's motion to the effect that the Chemical-trade Section keep in touch with the Departmental Committee likely to be appointed by the Chancellor of the Exchequer, and the Section urges the Chancellor of the Exchequer to appoint a Departmental Committee, including representatives of the chemical-industry, to report and examine upon the best methods of obtaining untaxed alcohol.

Dr. Redwood intimated that there is no desire on the part of the Automobile Club to do anything to usurp the position of the Chemical-trade Section in respect to obtaining untaxed spirit, and said this is an instance in which concerted action could not be otherwise than helpful to chemical, engineering, and agricultural concerns, and on that basis he was pleased to offer their co-operation.

The Chairman proposed, and it was agreed, to write a letter thanking the Club.

SOUTH AFRICAN SPIRIT-DUTY.

The Chairman said the recently imposed spirit-tax in Cape Colony is considerably affecting British exporters, as it practically means the entire loss of the export of British tinctures to Cape Colony, and a serious dislocation of existing business.

Mr. E. A. Webb, who was asked to give his views, pointed out that it is an exceedingly difficult subject upon which to approach the Colonial Governments and tell them what regulations they should make. It is unlikely that a large revenue will be raised from the new tax, because the imports of tinctures into Cape Colony will be stopped altogether. The Chamber of Commerce might, however, convey to the Governments the disadvantages under which they labour, but he did not think any action on this side would have any really beneficial effect.

Mr. E. J. Millard also recognised that the position is an extremely difficult and delicate one to deal with. The Cape Colony, he said, is a self-governing one, and nobody can interfere with its internal affairs. He urged that the Chemical-trade Section should support Mr. Darroll, an able pharmacist, in Cape Town, who had told the Government that the locally-made spirit is unsuitable for manufacturing medicinal preparations. He (the speaker) thought the matter should be left in his hands. No doubt it is an act of protection, and the Government have openly admitted that the measure is designed to encourage the wine-industry of the country. If approached on the question, they would probably say we have no right to interfere with the economic condition of their Colony. What steps could possibly be taken? They could only deplore the fact that the tax has been imposed, and it must be borne in mind that many other subjects are involved in the tax. His information was to the effect that the Act does not apply to the other Colonies, but it is quite probable the other Colonies will fall into line. It is a curious commentary, he said, that Dutch medicines will be imported under the old régime.

Mr. MacEwan pointed out that the tax had not been brought in by a new Act, but is a new reading of the item in the Customs Union tariff, saying that other kinds of spirits shall pay duty of 15s. per proof gal.

Mr. Tyrer thought that representations should be made to the Agent-General in London, pointing out that 200,000*l.* per annum, which the Cape Government said they lost, was more than the entire exportation of tinctures from this country to all the Colonies and everywhere else.

The Chairman supported this proposal.

Mr. Millard thought that as their friends in Cape Colony had given them the lead, it would be unwise not to back them up.

Mr. H. E. Stevenson thought it would be found that the duty of 15s. was not greatly in excess of that imposed by other Colonies. He also supported the proposal that Mr. Darroll should be written to officially, and that application be made to the Agent-General for the Cape.

The Chairman therefore moved that Mr. Webb and Mr. Millard be asked to prepare a memorandum to be transmitted through the Chamber of Commerce, and sent to the Agent-General of the Cape Government, and a copy sent to prominent firms in Cape Colony and the various Pharmaceutical Societies. This was unanimously agreed to.

Mr. Tyrer spoke of the difficulties in regard to the Canadian Customs-duties on spirit, instancing the fact that Canada charges import-duty on the value of the raw material and contents, *plus* the duty, which made a considerable difference in the matter of tinctures.

Mr. Webb said the unfortunate part of it is that spirit, ether, nit. going from Germany to Canada is only charged duty on the value in Germany (*i.e.*, duty-free), which is very unfair and entirely in favour of Germany, as it put that country in a better position to compete, since the value in Great Britain certain duty paid is taken.

The Chairman suggested that a statement be drawn up on this matter also, and added to the Committee's recommendations.

Other business included the proposal *re* a Minister of Commerce, and the approaching expiration of four commercial treaties with Roumania, Switzerland, Portugal, and Holland, but these questions were only briefly touched on.

MAGNESIUM CHLORIDE when heated with mercuric oxide becomes magnesium oxide, and by this means magnesium may be separated from the alkalies in a less troublesome manner than by the phosphate method commonly in use.

Association Ballads

THE PURPOSE.

*The men, their aims, their daily irk;
Their troubles, trials, thoughts, and views
On things politic, foes that lurk
In friendly guise, but treach'rous work—
These be the burden of our Muse.*

XXV. GLASGOW TRADE.

One hath said in scornful numbers
"Price protection's but a dream,
Cutter comes while chemist slumbers
Wrapt in sloth and self-esteem."
Glasgow chemists tried in earnest,
Strove to make their brethren whole,
"For the fickle moon thou yearnest,"
Cried the frightened, fluttering Soul.
"Never wait ye till to morrow;
Bring your brethren here to-day;
Shun past days of pain and sorrow;
Blanch the Cutter with dismay."
"Credit's short and 'patents' fleeting;
Doughty deeds of devring do;
Heed not timid lambkin's bleating;
Keep face-value aye in view."
Bravely spoken, keen for battle,
Chemists flock from West and East,
Sixteen score made rafters rattle,
Sixteen score at very least.
Quite a number to make war if
But the legions would be true
To th' Association tariff,
Thinking not of future rue.
But alas! the Master Cutter
With the Scots desired a fall,
Seized their stronghold; and a flutter
Shook the street of Sauchie-hall.
Thus at once the Vision ended,
And the tariff disappeared;
Secret conclave Glinn attended,
"Pats's banner only feared."
Wise were they; but good they're doing,
Good will do, and good have done,
Pale Camlachie still pursuing
Till the victory is won.
Bally-kin-rain doth remind us,
We may make a trade sublime,
Leaving arsenic trails behind us,
But we reach the Courts in time.
"Shorter hours and longer profit."
Strive for these with might and main,
Chemists all from Mull to Moffat,
Keeping Sutherland in train.
Glasgow then is up and doing,
Greenock, Paisley close at hand.
Fickle fortune fondly wooing;
Foremost in the ranks they stand.

Birth.

SACHS.—On May 18 the wife of Mr. J. Sachs, chemist and druggist, of Pretoria, of a son.

Deaths.

DYSON.—At Grays, Essex, on June 18, Mr. Alfred Dyson, chemist and druggist, aged fifty-eight. Mr. Dyson had been in business at Grays for fifteen years.

EARP.—At Harrogate, on June 18, Mr. William Earp, aged sixty-three. Mr. Earp was for many years in business as a chemist at Tunstall. He retired about twenty years ago and went to live at Celwyn Bay, where he was one of the most prominent and respected residents. He was identified with many public movements at Colwyn Bay, having been a member of the School Board and of the Local Board. The funeral took place at Llandrillo on June 22. Mr. Earp leaves a widow, a daughter, and a son.

GREAVES.—At Laurel Bank, Codnor Park, on June 28, Mr. William Samuel Greaves, pharmaceutical chemist, of

the firm of Greaves & Sons, chemists, Ironville, Derbyshire, aged sixty-one. Mr. Greaves, who was widely known and esteemed, had resided at Codnor Park all his life. For a great number of years he had been associated with religious work in the district, and he was at one time a member of the local Parish Council. He retired from business about six months ago. He leaves a widow and a large family.

HAMLIN.—At Charing Cross Hospital, on June 28, Mr. C. Hamlin, late dispenser at the Royal Westminster Ophthalmic Hospital. On June 17 Mr. Hamlin had an accident with a Winchester of carbolic-acid liquid. An artery in the hand was severed and the acid set up blood-poisoning, from the results of which he died, much to the regret of the whole hospital staff.

HARRINGTON.—At Middlesborough-on-Tees, on June 25, Mr. Philip John Harrington, chemist and druggist, aged sixty. Mr. Harrington was for many years in business in Newport Road, and later in Linthorpe Road, Middlesborough, finally returning to the first-named address. For many years Mr. Harrington was an official at St. Paul's Church. There was a large attendance at the funeral, which took place on June 28.

HOLT.—At Liscard, on June 16, Mr. Richard Wylde Holt, chemist and druggist, Liscard, aged seventy-nine.

MASON.—At 7 Bellefield Avenue, Dundee, on June 25, Mary Barbara, eldest daughter of Mr. James Braik Mason, chemist and druggist.

OWEN.—At Grosvenor Place, Newcastle-on-Tyne, on June 24, Mr. William Owen, pharmaceutical chemist, aged eighty-five years. Mr. Owen was an alderman of Newcastle. He was born on December 13, 1818, and until a

short while before his death was wonderfully robust, but latterly had been complaining. He commenced business in the early 'forties, first in Collingwood Street, and Adelaide Place. The Adelaide Place shop was first relinquished; and then, when the transformation of Collingwood Street began, Mr. Owen removed to Barras Bridge, where he also carried on business as a mineral-water manufacturer. He became a member of the Pharmaceutical Society, and was thus registered as a pharmaceutical chemist when the 1852 Act passed. He was successful in business and was highly esteemed as a pharmacist. Mr. Owen became a member of the Newcastle Town Council in August, 1868, and represented St. John's ward until 1885, when he was elected an alderman. He was a progressive man, and took an active part in the business of the Council until quite recently. The Alderman is survived by Mrs. Owen and three sons, one of whom, Mr. A. E. Owen, was associated with him in the business at 151 Barras Bridge. Our portrait is reproduced from the "Newcastle Chronicle."

POWER.—Cabled information was received in London on Saturday, via New York, announcing the death of the father of Dr. F. B. Power, director of the Wellcome chemical research laboratories. Mr. Power had attained the venerable age of seventy-eight years, but his death was unexpected.

WALLIS.—At 17 Fairoak Road, Roath Park, Cardiff, on June 16, Mr. James Samuel Wallis, pharmaceutical chemist.

DRUGS AND CHEMICALS valued at \$24,000 were imported into British Honduras during 1903 against \$20,000 for the corresponding period of 1902.



Observations and Reflections.

By XRAYSER.

Little Statutes

creep through the Legislature every year with but slight comment, and without exciting any undue enthusiasm or indignation. But it sometimes happens that one of these proves to be fraught with more far-reaching consequences than attends the enactment of a scheme on the merits of which the nation gets divided into hostile camps, and which for the time exhausts the resources of orators and editors. But journalists, politicians, and Hyde Park demonstrators are not invariably inspired seers. It would not be the wildest of prophecies to anticipate that two of the "minor measures" of the present Parliamentary Session which are getting near their final stages may effect a more serious social revolution than would result from the adoption of all the great Government Bills which are at this moment the subjects of so much clamour. One of these comparatively disregarded schemes is

The Metric Weights and Measures Bill.

If this is going to be adopted and enforced seriously and as it is drafted, the Great Britain of 1909 will be almost a foreign country to the majority of us. The invasion and conquest of the realm by an alien race would hardly affect our daily habits more completely. Chemists and doctors are certainly better prepared for the metric change than the average of the community, but not one in fifty of these could state in the new terms the medicinal dose of prussic acid without a preliminary series of mental gymnastics. The "Lancet," which favours the proposal, so far appreciates its possible risks as to urge that coincident with the new law coming into operation it should be made illegal to dispense prescriptions written in the old form. Here is a prescription copied from a pharmaceutical publication which, for purposes of instruction, gives both the apothecaries' weights and measures and their metric equivalents side by side. For the purpose of showing how our minds will have to be disciplined I quote it without the enlightening drachms and minimis :

Bismuth. salicylat.				
Sodii bicarb.	...	...	aa.	7.76 gm.
Acid. hydrocyan. dil.	...	...		2.8 ML.
Tr. mucis vom.	...	...		7.1 ML.
Spt. chloroform.	...	...		0.14 DL.
Aq. menth. pip. ad	...	...		0.17 L.

Sooner than he expected a dispenser in full work would come to think in millilitres and decigrams, but I for one should religiously abstain from taking metrically compounded physic until I was satisfied that his education in this direction was fairly complete.

The Shop-hours Bill

is the other probable addition to the statute-book from which it is possible that a new life may open for many thousands of persons. Particular care has been taken by the opponents of this legislation to render the adoption of its advantages as difficult as possible, and unless some energetic organiser should appear to act for the classes who will not know how to set to work themselves, it is very likely that the opportunity will never be utilised. Cynics say that in the event of the Act proving successful the only result will be an increased consumption of alcohol and fiction. On the other hand, may we not try to calculate the aggregate of happiness which one hour's leisure daily might provide for a quarter of a million people who now have scarcely any? The new

Marquis of Salisbury,

speaking last week at King's College, assured his audience that the optimism of this country was becoming a dangerous vice. The tendency on all sides, he said, is to work less. "In America men struck for higher wages; in England for fewer hours. To his mind this was one of the most calamitous signs of the times." When the Marquis was Viscount Cranborne and in the House of Commons he was one of the most cordial supporters of Sir John Lubbock's Bill: with his title he seems to have adopted his late father's opinions in regard to hours of labour. In the account of American pharmacy in last week's Supplement it was stated that chemists' shop-hours in New York are generally from 7 A.M. till 11 P.M. This is worse than our average, and I hardly suppose that even Lord Salisbury would regard some modification of that sort of toil as calamitous. It is true that the demand for recreation, holidays, and change has developed considerably, perhaps alarmingly, in recent years. But it is equally true that practically none of the consequent amelioration has come the way of the large and unorganisable class for whose benefit the Shop-hours Bill is intended.

Some Chemist-Opticians

may have been a little discouraged in their efforts to qualify themselves for the better conduct of their spectacle-trade by the rather ungenerous and not very tactful opposition which a section of medical men have manifested towards this development. These may derive some consolation from a curious paragraph which was shown to me lately in the well-known work on "Ophthalmic Surgery," by Messrs. R. Brudenell Carter and W. Adams Frost. Therein Mr. Carter, dealing with cases of iritis, tells the following incident. When he was at the South London Ophthalmic Hospital, he says, the staff were at one time astonished at the large number of severe cases of iritis which they were called upon to treat. Ultimately it was discovered that a publican in the neighbourhood had acquired a reputation for a specific for "bad eyes," which he was in the habit of giving away to his customers. It was a zinc lotion, and this when applied to iritis never failed to aggravate the malady. Then the staff saw the publican, who, Mr. Carter says, was a worthy fellow, and was shocked to learn how much harm he had unconsciously done. And now comes the amazing part of the story. They persuaded the worthy publican to substitute a weak solution of atropine (!) for his zinc lotion, and thus, it is added, the fame of the house was preserved and the hospital lost its severe cases of iritis. It is not impossible, Mr. Carter comments, that the atropine may have aggravated cases of impending glaucoma, but that risk was not known at the time.

The Meteorological Office

is a specimen of a really useful piece of work which the Government can accomplish by utilising its great resources for the benefit of the nation. Many lives and much property are no doubt saved every year by the warnings to coast stations which this office is able to furnish. The total cost of the organisation is 15,300*l.* per annum, and out of that it has to pay for its telegrams to the Post Office, which, it is complained in a report just issued, sometimes delays the delivery of its storm warnings for fourteen hours. This Meteorological Office is one of the quaintest of modern organisations. It is paid for by Parliament, appointed by the Royal Society, subject to the control of the Treasury, and is itself registered as a limited company. The report alluded to is the outcome of a departmental inquiry into its working presided over by Sir Herbert Maxwell. The Office claims, I notice, that its daily forecasts have been absolutely justified fifty-five times out of a hundred during the past ten years, and partly correct another thirty times.

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Editorial Comments.

A Company-return.

THE commendable efforts of the Executive of the North British Branch of the Pharmaceutical Society to get Sir John Tuke to add pharmacy to dentistry and medicine, in his motion for a return of companies formed to practise in these branches, has failed so far, because Sir John had obtained the consent of the House of Commons to the return before the Executive's resolution could have reached him. It would have been of great advantage to chemists and druggists if the return had included pharmacy, because for the first time these three branches of the medical profession would have been brought into contrast, so far as company registration is concerned. It may be remembered that the Lord Chancellor in his Bills and efforts to legislate on the company question kept pharmacy quite distinct from dentistry and medicine, and other Ministers have considered that the distinction must be adhered to in legislation. As the matter is primarily one of title the same principle applies equally to all three. Unfortunately for pharmacy, however, the ruling case as regards companies was not taken upon titles, but upon the sale of poisons and keeping open shop for that purpose. The decision that companies may do so applied to any other act done by companies which is prohibited to unqualified individuals by the first fifteen sections of the

Pharmacy Act. The consequence is that chemists in their efforts to legislate on this matter, especially in respect to treating limited companies like unqualified individuals in the use of titles, start with the prejudice against them that the House of Lords has ruled company trading to be safe for the public, as companies cannot trade without the help of qualified persons. Since the custom of registering dental companies is comparatively recent, and medical companies are exceedingly few, pharmacy would have given a splendid object-lesson to parliament if it had been included in Sir John Tuke's return. They would have seen how quickly a legal evil can grow when legislators pay more attention to dividends than they do to justice. In this connection we are able to give some figures which we feel sure will interest the trade. It may be remembered that a directory of limited companies connected with the drug-trade was published in the *C. & D. Diary* of 1896, and a similar directory, brought up to October, 1897, was printed in our Winter Issue of 1898. This contained the names and particulars of 376 companies, and eleven more were registered in the last three months of 1897—that is, 387 were in existence at the end of 1897. We have searched our files since then, noting which companies registered take power to trade as chemists and druggists, and we subjoin the figures :

Registered up to the end of	1897	...	387
" during	1898	...	101
" "	1899	...	170
" "	1900	...	158
" "	1901	...	143
" "	1902	...	131
" "	1903	...	168
" Jan. to June	1904	...	70
			1,328

It should be distinctly understood that these figures do not represent all the new companies about which paragraphs have appeared in our pages. Thus, in 1898 we reported 752, but of these only 101 were registered to trade as chemists and druggists—"limited," of course, being understood. A proportion of these companies (say, about one-tenth) are manufacturing and wholesale druggists, chemical-manufacturers, druggists' sundriesmen, and other large and old-established concerns, which have not traded as retailers although in their articles of association they take the power *pro forma* to do so. There are also represented in the total a considerable number of established businesses which for family or other reasons have been registered as companies, the management remaining in the hands of qualified chemists. Allowing for all these, we are within the mark in saying that 1,000 out of the 1,328 companies were formed by persons who are not chemists and druggists by examination; many of them have been grocers or similar storekeepers, and they have adopted the company principle in order to make themselves right according to the law as interpreted by the House of Lords in 1881. Ten years ago (*i.e.*, in 1894) pharmacy-company registration reached what was then thought to be the high figure of 3.3 per month, or 40 in the year, and the number of such companies registered was as 1 to 60 individual chemists. Now nearly four times as many are registered yearly, and the proportion is as 1 company to 12 chemists. At this rate of retrogression chemists as individuals should be wiped out before the century is half done. It is this consummation which the Pharmacy Bill is intended to prevent by ensuring freedom of pharmacy-company formation provided the companies' businesses are conducted precisely as those of individual chemists—viz. with qualified chemists as the absolute and responsible controllers.

The Cape Spirit Move.

THE handful of manufacturers and wholesalers who attended at the London Chamber of Commerce on Tuesday afternoon spent a profitable ninety minutes in matters of vital interest to the whole trade. The matter which most closely affects the pocket of the wholesale drug-trade is the decision of the Cape Treasurer to impose the spirit-duty of 15s. per proof gal. on imported medicinal tinctures. In our issues of May 28 and June 4 we gave cabled information about this decision, and have since added certain details which have come to us by mail. Briefly the facts are that the Cape Government finds itself with a revenue deficit, and in the search for more money it listened to extremely exaggerated statements by interested persons in regard to the loss of revenue by the importation of spirituous tinctures free from the spirit-duty of 15s. per proof gal. which the South African Customs Union imposes on other sorts of "spirits" than "perfumed spirits" and "liqueurs and cordials." One member of the Legislative Assembly told his colleagues from his seat in the Assembly that the Cape revenue loses 100,000*l.* if not 200,000*l.* a year by free importation of "foreign spirits." What he meant by spirits is not clear, but what the Assembly were thinking about was medicinal tinctures, and the statement convinced the Assembly. As 100,000*l.* means at least 133,000 proof gals. of tinctures, it is interesting to note that this exceeds by 10,000 proof gals. the entire amount of medicinal tinctures, spirits, and essences exported by Great Britain in 1903 to the whole world! The fact of the matter is that Dr. Hoffmann, who made the statement to the Assembly, used imagination and not fact. He, and most of those who urged the Government to interpret "other sorts" in the Union tariff in a way opposed to the intention of the Bloemfontein Convention, had one object in view—viz., to exclude medicinal tinctures made in Great Britain. It was openly confessed by those who manœuvred the matter from the outside that the principal result would be to benefit the Colonial wine-industry, hence the revenue will benefit very little. At present the manufacture of spirit from anything else than grapes is practically non-existent in the Colony, but under the new Excise Act the duty (previously 4s. per proof gal.) on wine spirit is made 6s., and upon other spirit 10s., per proof gal. Under the old régime Colonial wholesale houses did not find themselves much handicapped by the 4s. duty, and large quantities of Dutch medicines were made in the Colony. The bulk of the spirituous medicines was, however, imported. It is not surprising that the wholesale houses did not disapprove the suggestion to enormously increase the import-duty, for it is obvious that, as in all protective measures, the internal price will be fixed at just a little below the price of the imported article. Thus the Cape Government will get 6s. out of about 15s. which the retail trade will have to pay for duty on colonial-made preparations. But this does not end the trouble. There are other colonies in the Convention—Natal, Orange River Colony, the Transvaal, and Rhodesia. These have a say in the matter, and no axe to grind, because spirit is only distilled in the Cape and Transvaal. Yet the drug-trade of all will suffer if they have to pay 15s. a gallon more for their proof tinctures as a contribution to the Cape wine-industry. In this connection it is curious to note that the Rhodesian Government has definitely recognised that spirit for medicinal purposes should be tax-free. Apparently the Cape Government is just at the beginning of its troubles in the matter. Instead of perverting the Convention tariff to create a wildly protective policy, it would have been wiser, in fixing an import duty,

to equalise it and the Excise-duty. But it is questionable if the Cape Government has acted legally in imposing the import-duty. The spirit duties agreed to by the Convention were obviously what are commonly known as "spirits," and a special privilege was extended to other alcoholic preparations. Thus, extracts and essences, and patent and proprietary medicines (many containing alcohol) pay 25 per cent. *ad val.*, while all goods, wares, or merchandise not elsewhere charged, and not enumerated in the "free list," pay 10 per cent. *ad val.* The latter from the first, and according to custom, was held to include all medicines not patent or proprietary. The Chemical Section of the London Chamber of Commerce have, therefore, excellent grounds for taking the matter up, and it may be possible to carry with them in their effort leading South African pharmacists. Since the matter affects pharmacists in all the Colonies, it is desirable that the various Societies should assist in getting the matter reduced to a more equitable basis.

Note.—In the foregoing we refer for convenience to the import-duty as 15s. per proof gal. According to the tariff the duty is 15s. per gal. on "spirits" exceeding 3 per cent. and not exceeding proof. Apparently, therefore, the duty is fixed, and not *pro rata*.

Our Chemist Barristers.

Congratulations to Mr. Marshall Freeman and Mr. Glyn-Jones in being so early briefed, and double congratulations to both of them on winning their cases. Both of the cases are of considerable legal interest, but the ammonium-carbonate case under the Sale of Food and Drugs Acts, in which Mr. Glyn-Jones appeared for the defendant, is naturally of greater interest. His argument was exactly of that nature which only a specialist can successfully use, and his intimate knowledge of the Acts and of the British Pharmacopœia standards was exercised to the full when he persuaded the Magistrates that ammonium carbonate is not necessarily a drug, and that there is no standard for it when the carbonate is sold commercially. The latter point is ingenious, but it is based upon sound fact, as the British Pharmacopœia prescribes that before the carbonate is assayed the effloresced material must be scraped off and only the semi-translucent matter used for the assay. We seem now to have a chance of getting the legal limitations of the Pharmacopœia, in respect to articles mentioned therein, placed properly before magistrates from the pharmaceutical point of view.

Looking Back.

The "Lancet" for some time past has been giving extracts from its journals of 1826. Last week there was a table showing the "disproportion" between the different grades of medical men in Paris and London in 1822. What interests us is to compare the figures given for London with what they are now :

	1822.	1902.
Inhabitants	... ... 1,200,000	4,579,110
Physicians	... ... 174	
Surgeons	... ... 1,000	
Apothecaries	... ... 2,000	
Chemists and druggists	... 300	1,500

The figures given for chemists are approximate. It will be seen that whereas the number of medical men is only double what it was eighty years ago, there are five times as many chemists and the population is four times greater.

Staining Prize Dogs.

An important case has just been decided by the committee of the Kennel Club, which sits from time to time to hear appeals from disqualifications at dog-shows on

account of alleged fraudulent practices. These appeals are always conducted with legal formality, and in the case just decided two exhibitors against whom allegations were made were represented by counsel instructed by solicitors. It appears that two Irish terriers were disqualified on formal protest for having colouring-matter in their coats when exhibited at a dog-show held recently at Blackburn "under Kennel Club rules." A veterinary surgeon's certificate was produced affirming the presence of brown colouring-matter on the dogs' coats, and cross-examination of the parties concerned elicited the admission that sheep-dip had been used for the purpose, as defendants urged, of keeping the dogs in a wholesome condition. Counsel argued at length that no fraud was intended or was possible under the circumstances, but after deliberation the committee decided against the practice and suspended the principal offender from exhibiting at shows held under Kennel Club rules for a period of seven years—an exceptionally severe punishment.

Metric Measures in Medicine.

A writer in the "British Medical Journal" gives the following mnemonic for the use of medical men who desire to write prescriptions in the metric system, but still think in grains and minimis. The essence of the note is that 1 gram = 15.432 grains and 1 c.c. = 16.9 minimis.

Taking each of these figures as 16, and dispensing always sixteen doses, it is obvious that for every grain or minim per dose one wishes to give it will be necessary to weigh out or measure 1 gram or 1 c.c. Now, 8-oz., 4-oz., and 2-oz. bottles contain respectively 16 tablespoonfuls, 16 dessert-spoonfuls, and 16 teaspoonfuls. Therefore, by using only bottles of these given sizes the factor 16 becomes constant, though the size of the draught varies. Again, for powders 16 may be very conveniently dispensed, or, if that be too many, 8 are as easily calculated. An example will make the method clear :

Tr. nuc. vom.	... ... mv.	$mv \times 16 = 5$ c.e.
Ac. nitro. mur. dil.	... ml.c.	$ml.c. \times 16 = 10$ c.e.
Spt. chlorof.	... ... ml.c.	$ml.c. \times 16 = 10$ c.e.
Aq. ad ...	... ... 3 s.	Aq. chlorof. ad 3 vij., or 224 c.e.
Ft. M. Mitte 3 vij.		

(N.B.—ml.c. becomes 5 c.e.; ml.c. becomes 10 c.e.)

All that is necessary, therefore, is to provide oneself with a set of gram weights, a small graduated cubic centimetre measure, and bottles of 8-oz., 4-oz., and 2-oz. capacity.

The error involved is not very great : in the case of solids there will actually be $\frac{1}{16}$ part of a grain error (on the safe side), and in the case of minimis about $\frac{1}{17}$ of a minim in excess.

Early Egyptian Medicine.

Dr. Caton, in delivering the Harveian Oration, devoted part of his time to a fascinating account of I-em-hotep, the Egyptian god of medicine, and early Egyptian views as to the circulation. I-em-hotep was a learned physician who lived about 3500 B.C., and on account of his success as a physician was elevated to the position of a god. Dr. Caton gives references to medical papyri to show the advanced state of knowledge as to the circulation in the time of I-em-hotep, but the *materia medica* of the time will probably interest chemists more :

The Egyptians possessed the following drugs: Lactaea; various salts of lead, such as the sulphate, with the action of which in allaying local inflammation they were well acquainted; pomegranate and aenanthus-pith as vermifuges, peppermint, sulphate and acetate of copper, oxide of antimony, sulphide of mercury, petroleum, nitrate of potash, easter oil, opium, coriander, absinthe, juniper (much used as diuretic), caraway, lotus, gentian, mustard, ox-gall, aloe, garlic, and various bitter infusions; mandragora, linseed, squills, saffron, resin, and various turpentine products; cassia, certain species of cereumis, cedar oil, yeast, colchicum, nasturtium, myrrh, tamarisk, powdered lapis lazuli, vinegar, indigo; the oasis onion, mastix and various gums, mint, fennel, hebanon or hyoscyamus, magnesia, sebaste (a tonic and a cough-medicine), lime, soda, iron, and a great number of other agents the names of which no one can at

present translate. Prescriptions were written out in due form, and sometimes at great length, fully equaling those of the most enthusiastic therapist of our own day. The longest prescription I have read contained thirty-five ingredients. To read it was a formidable task; to take it, I should think, a perilous one. Some prescriptions are wise and rational, a few strange and repulsive; some are associated with charms and spells. Human nature is the same in all ages; hence one was not surprised to meet with hair-invigorators, hair-dyes, cosmetics, pain-killers, insect-powders, and a soothing-syrup containing opium, for small children, in use 3,500 years ago. It was rather interesting to find that the symbol for a half-tenat, often used in their prescriptions, is identical with that indicating a drachm with us, though the amounts are not the same. I trust the drachm will soon be as obsolete as the tenat.

Summer Outings.

UP THE RIVER.

On Friday, June 24, our offices at 42 Cannon Street were deserted by the staff, who had been invited by the principals to lunch at Windsor and then have a trip up the river. The party arrived at the Royal Borough about noon, and promptly at 12.30 sat down to luncheon in the Victoria Hall of the White Hart Hotel. After luncheon a party of about fifty took a trip as far as Maidenhead and back in *The Queen of England*, the rest of the company visiting the Castle and grounds. All assembled again in the Victoria Hall at tea, and a most happy day was wound up with a concert.

AT BRIGHTON.

The annual excursion of the employés of Stephen Smith & Co. (Limited), of Bow, E., took place to Brighton on June 18. The party left London Bridge by the 8.15 A.M. train, and at ten o'clock brakes started for the Devil's Dyke, returning to the Criterion at Brighton for dinner at 1.30 P.M. Mr. Hall, managing director, spent the day with the staff, and presided at the dinner, close upon a hundred being present. Mr. Hall announced that the past year's business had been the best the company had ever experienced. After dinner a number of the excursionists took a trip to Worthing by the steamer *Worthing Belle*, getting back in time for tea at 6.15. The return journey was begun at 7.55 P.M., all having spent a most enjoyable holiday.

AT FOLKESTONE.

Messrs. C. J. Hewlett & Son gave their annual outing to their staff and employés on Saturday, June 25. Folkestone was selected for the visit this year, and upwards of seventy left London Bridge at an early hour, and spent the morning boating, bathing, &c.; and at one o'clock dinner was served at the Pier Hotel, with Mr. J. A. Eveness in the chair. The usual loyal toast having been honoured, the Chairman proposed "Success to the Firm," and read a telegram of good wishes from Mr. J. C. Hewlett. The toast was enthusiastically received with musical honours. After dinner excursions were made to Hythe, Sandgate, &c., where tea was taken, and the return journey was safely accomplished, London being reached about 10 P.M. The outing was voted one of the most enjoyable and successful hitherto undertaken, the arrangements being carried out in excellent style by the Hon. Secretary, Mr. H. Gillard.

AT MARCATE.

On June 25 the forty-eighth annual dinner of the employés of Messrs. Ford, Shapland & Co., chemists' printers, Great Turnstile, W.C., took place at the Imperial Hotel, Margate. Mr. R. Jackson occupied the chair, and was supported by Mr. M. C. Heywood and Messrs. Henry J. Dalgleish, D. Lane, A. H. Lewis, H. Simpson, and W. Parker (Vice-Chairman). Having done justice to the good things provided, the Chairman gave the Royal toast, which was drunk with musical honours. The Vice-Chairman then proposed "The Firm," and spoke in eulogistic terms of the excellent feeling which had always existed between the various heads of departments. The toast having been enthusiastically drunk, the Chairman, on his own behalf,

expressed his thanks for the renewal of their kindly feelings; and Mr. Heywood, in also returning thanks, remarked that it was impossible that any two partners could work together more harmoniously than he and Mr. Jackson had done during the past twenty-three years. The next toast was that of "The Representatives," proposed by the Chairman and replied to by Messrs. D. Lane, H. Simpson, and A. H. Lewis. Mr. Heywood then said that for twenty-two out of the twenty-three years Mr. Jackson and he had been proprietors of the business they had had the services of one whom they had looked upon more as a personal friend than an employé. He alluded to their late West of England representative, Mr. Henry J. Dalgleish. It was a great regret to him and his partner and all his fellow employés when Mr. Dalgleish tendered his resignation, and, as that would be the last occasion on which they would have Mr. Dalgleish with them, he desired to present him with a silver tea and coffee service on behalf of the firm and the employés. He trusted that Mr. Dalgleish might be as successful in business on his own account as he had been as their representative. Mr. Dalgleish, who on rising to respond was musically voted "A jolly good fellow," spoke of the kindly feelings that had always existed between the firm, himself, and his fellow-employés during the many years they had worked together. He thanked all for the very handsome present they had given him. The company joined in singing "Auld Lang Syne," and the proceedings were brought to a close with a vote of thanks to the stewards and expressions that this outing ranked amongst the best ever known to the firm. The company returned to town shortly after 11.

AT BARRY.

In delightful weather the members of the Cardiff Pharmaceutical Association, to the number of about fifty, journeyed to Barry on June 29 for the purpose of holding their first summer picnic. On arrival at their destination, the party proceeded by brakes to Porthkerry, where considerable time was spent in rambling on the shores of the Channel and through the delightful park which forms part of the demesne of Lord Romilly. At five o'clock a return was made to Barry Hotel, overlooking the largest single dock in the world. Here a sumptuous tea was provided, at the conclusion of which the President of the Association, Mr. D. Anthony, said he was particularly pleased at Mr. Hagon's return to the Pharmaceutical Council, for he had done a great deal for their Association, and he hoped the time would come when they would see him in the Presidential chair of the Pharmaceutical Society. Mr. Benjamin, of Penarth, the Vice-President, echoed these sentiments, and Mr. Robert Drane said it was high time a very great change was effected in the principles and methods of the Pharmaceutical Society, for, to his mind, that Society in no sense represented the trade. He dared say some change was gradually taking place in its methods, and he should like to see other provincial men sent up to the Council to give that change a greater impetus. Mr. Hicks, who followed, considered that the Pharmaceutical Society was useless as at present conducted. It had been absolutely out of touch with the trade of the country, and had been engineered mainly for the grandeur of the London trade. After a few remarks from Mr. Hopkins (Barry), Mr. J. A. Jones (Cardiff), and Mr. Shenton (Secretary to the Assistants' Association), Mr. Hagon replied that his election was due almost entirely to the efforts of the members of the Cardiff Association. When they entered on the fight they never anticipated a successful result at the first trial, and if it had not been for the warm sympathy extended towards them by their English and Scotch friends he would never have been returned.

CEYLON RUBBER, on account of its purity, is said to be specially suitable for the manufacture of indiarubber sponges, now so commonly in use. It is said that one of the largest manufactures for these sponges is in St. Petersburg—the secret of the preparation having been discovered by a Russian. Only the very best raw rubber can be used, and Ceylon rubber is said to be so well prepared that it was mistaken by the New York Customs for a manufactured article.

Legal Reports.

Trade Law.

The Adrenalin Patent.—Parke, Davis & Co. have taken steps to protect their patent-rights in adrenalin. Notice has already or will shortly be served on alleged infringers [in U.S.A.]. Among those said to be infringing on their rights are Armour & Co., manufacturers of suprarenalin; H. K. Eli Lilly & Co., manufacturers of sanguostine; H. K. Mulford & Co., manufacturers of adrenalin; Frederick Stearns & Co., manufacturers of adrenephine; Henry K. Wampole & Co., manufacturers of hemostatin; John Wyeth & Brother, Co., manufacturers of catrenalin. The outcome of these cases will be looked for by the trade with keen interest.—*O. P. & D. Reporter.*

Wine-licences.—The Lord Mayor decided, at the Mansion House on Monday, June 27, an interesting case in which the Star Wine Company (Limited) were summoned, at the instance of the Board of Inland Revenue, for dealing in foreign wines at 18 Fleet Street, E.C., without a licence. It was proved that the defendants hold a licence in Three Court Lane, Limehouse, and have an office in Fleet Street. At the latter orders were received, but they were executed from the Limehouse premises. It was submitted for the Board of Inland Revenue that the contract for the sale took place on unlicensed premises, and the case of Stephenson *v.* Rogers was quoted as evidence of the law on the point. In view of the fact that the defendants had, since the proceedings commenced, taken out a licence for the Fleet Street office, the Lord Mayor imposed a nominal fine of 5s., and 2s. costs.

Supreme Court of Judicature.

SUNPEAM BLEACHING COMPANY *v.* CLARKE.

The defendant in this action appeared in the Appeal Court on Wednesday, June 29. The plaintiff company, he said, wished to put him into prison for disregarding an order of the lower Court, and he had appealed to their Lordships on May 13, who found that certain improper letters had been sent out to customers, and made an order that fresh letters were to go out recalling the former letters. The plaintiffs had not yet sent out those letters, although he had written to them on June 7. They had taken no notice of the communication. Lord Justice Vaughan Williams said if the applicant wished to have the plaintiffs committed for contempt, for disobeying an order, or for failing to perform an undertaking, the proper way was to serve them with a notice of motion to come to court and show cause why they should not be committed. The applicant thanked his Lordship and withdrew.

High Court Cases.

RUSSIAN MANGANESE.

In the Chancery of Lancashire, Liverpool, on June 23, before Vice-Chancellor Sir Samuel Hall, the action of Everitt *v.* Forwood came on for hearing. The plaintiff, a Liverpool chemical-broker, claimed an account of profits alleged to be due to him under a contract made in 1895. The action was entered in October last, and by consent there was a reference to the Registrar to find the basis of account as between parties. Plaintiff, according to the contract, was to have one fourth of the net profits on the sale of manganese imported by the defendants from the Russian Caucasus. The Registrar found that the basis on which the account should be taken was that the profits of the defendants (who are shipowners and merchants in Liverpool) were 3½ per cent. on the gross proceeds, and that the plaintiff was to have one fourth of that amount. The defendants now appealed against the finding of the Registrar. A cross motion seeking to vary the Registrar's decision was also put forward by the plaintiff.

On behalf of the appellants (Messrs. Forwood Brothers) it was stated that in 1894 a Mr. Solilae, a Russian, formed a scheme for uniting a number of manganese-producers on the Caucasus into an association. Solilae knew the plaintiff, and he applied to him to see if he could find someone who would advance money in regard to the proposed combination. Plaintiff accordingly laid the matter before Messrs. Forwood, who decided to take it up, and an agreement was entered into in 1895

between themselves and the Caucasus Manganese Association by which it was provided, among other things, that for a period of five years Forwoods were to be the sole purchasers of the manganese ore produced by the Association, with the right of regulating the output; that they were to make advances upon the ore as soon as delivered to their agents; and that they were to get 6 per cent. per annum on their advances and 3½ per cent. on gross sales, in addition to the usual brokerage. Plaintiff was appointed their sole broker for the manganese, the remuneration to be one fourth of the net profits.

The case for the defence was that, the venture having for the whole period resulted in a loss, they were not indebted to the plaintiff, although they could not reclaim the 1,000*l.* paid to plaintiff on account of profits.

Eventually the parties came to an amicable arrangement, and the record was withdrawn.

ACTION AGAINST BOOTS (LIMITED).

MR. JUSTICE WARRINGTON, in the Chancery Division on Wednesday, June 29, heard the case of Harris and another *v.* Boots, Cash Chemists (Southern) (Limited), in which the plaintiffs sought an injunction to restrain the defendants, their servants, agents, or workmen, from making any alterations in the premises 162 Western Road, Brighton, except such as were authorised by an agreement between the parties, and an order to block up a window opening and restore all parts of the premises to the condition in which they were at the date of the covenant. The defence was that the alterations were necessary to the proper use and enjoyment of the premises, that they had the approval of the original lessor under whom the plaintiffs held, and that they were an improvement and added to the value of the premises. The hearing was continued on Thursday, when Mr. Justice Warrington gave judgment. He said the plaintiffs were not entitled as of right, and as the covenantees in the assignment, to specifically enforce the negative covenants in the lease, but only a right of indemnity, if used by the lessor. The lessor had not taken proceedings, and there was no reason to believe that he intended to do so. The action therefore failed, and there would be judgment for the defendants, with costs.

Trade-marks Act.

ALLEGED INFRINGEMENTS OF PORCHERINE.

At Worship Street Police Court on June 29, Alfred White, otherwise Jakson, 14 the Oyal, Hackney Road, appeared to three summonses charging him with infringements of the Trade-marks Act. The infringement related to the application of a liquid sweetening preparation known as "Porcherine"—a product of saccharin several hundred times sweeter than sugar, and used in mineral-water manufacture, sweets, confectionery, &c. It was alleged that an inferior production invoiced as "porcherine" had been sold by "Jakson," who was said to be the defendant. The case was adjourned.

County Court Cases.

AN INTERPLEADER ACTION.

At Bow County Court on June 24, Judge Smyly had before him an interpleader action referring to the business of the Stratford Chemical Company, of 20 Leytonstone Road, Stratford. The plaintiffs were Messrs. Snowdon & Co. (Limited), chemical-manufacturers, of West Ferry Road, Millwall, E., while the claimant was Henry Grace Coxon, a druggists' sundriesman, of 31 St. Paul's Road, Canonbury, N.

It appeared that the business of the Stratford Chemical Company had formerly been carried on by a man named Peterkin, but on February 17 a judgment was given against him in respect of some articles which had been supplied by Messrs. Snowdon & Co. Two days before this the claimant Coxon agreed to go into partnership with Peterkin, and with that end in view at once put 100*l.* into the business. On February 19 Coxon heard that several judgments were out against Peterkin, so he at once had a deed of dissolution of partnership drawn

up and signed. As most of the stock then in the shop had been purchased with the claimant's money, it was arranged under the deed of dissolution that the defendant Peterkin should relinquish all rights in the business on payment of a certain sum of money, and be kept on as an employé. On February 20 the bailiff put a man in possession, and although claimant told him that all the goods in the place belonged to him under the recently executed deed, goods to the value of 11*l.* were seized. It was in respect of these goods that the present action was brought.

After evidence had been given the learned Judge found for the claimant, with costs.

SULPHATE FOR CARBONATE OF SODA.

At the Strabane (co. Tyrone) Quarter Sessions on June 22, Mr. John McFarland, a farmer, of Plumbridge, sued Mr. John Devine, Strabane, for 15*l.*, as damages for injury to a crop of potatoes. Plaintiff bought carbonate of soda at defendant's shop, to mix with sulphate of copper for spraying potatoes, and it was alleged that the carbonate of soda was impure and injured the crop of potatoes. In the evidence for the prosecution Mr. S. Templeton, Belfast, deposed that the sample of soda he received was sulphate of soda, a salt which lacked the neutralising effect on sulphate of copper that carbonate of soda exerted. Defendant's manager said the firm were tea-merchants and grocers and not seed-merchants, and only sold the soda for washing clothes. Defendant's brother said he had used soda purchased at his brother's shop for spraying potatoes without injury to the crop. His Honour said the defendant had no business to sell the soda for spraying-purposes. He might have a remedy against whoever he bought it from. He (his Honour) would give the plaintiff a decree for 5*l.*, with 1*l.* 10*s.* analyst's expenses.

A QUESTION OF DISCOUNT.

An action was heard before Judge Wightman Wood at Leicester County Court on Friday, June 28, in which John Richardson & Co. (Leicester) (Limited) sued Freemans & Green (Limited), of Birmingham, for 2*l.* 13*s.* 7*d.*, balance of discount said to have been deducted by defendants from their account contrary to arrangement. The plaintiffs were represented by Mr. Simpson, solicitor, and Mr. W. Marshall Freeman, barrister (instructed by Mr. Cochane, Birmingham) appeared for the defendants. It appeared that for some years past plaintiffs had supplied goods to the defendant before the latter became a limited company, and it was contended that the defendant company were not entitled to continue the old arrangement, which, plaintiffs' solicitor alleged, was a matter of personal favour. Defendants had deducted 10 per cent. from an account of about 40*l.*, and the amount now claimed was the difference between what they had deducted and what they were really entitled to deduct according to the terms contained in the printed price-list of the plaintiffs (which was produced). Mr. Frank Driver, plaintiffs' ledger-clerk, was called in support by Mr. Simpson, but in cross-examination by Mr. Marshall Freeman witness admitted that 10 per cent. discount had been allowed for at least ten years without reference to length of credit. He also admitted that the goods in question were made from private recipes supplied by defendants, and were not included in the price-list produced. Asked by his Honour whether any notice had been given to defendants when their company was formed that the old terms would no longer apply, the witness said he did not think any written notice had been given. For the defendants, counsel submitted that the 10 per cent. was not a discount at all in the usual sense. It was a quotation intended to apply to all transactions. When the original business was taken over by the company the plaintiffs continued to supply the goods from the same recipes at the same prices, without raising any question. Had they intended to alter their terms, they should have said so at the time. Under these circumstances he contended that the company were entitled to be treated exactly as their predecessors whose business they had taken over. The Judge upheld this argument, and gave a verdict for the defendants, with costs.

Sale of Food and Drugs Acts.

ELDERBERRY-WINE.

At Durham City Police Court on June 23, Thomas Colpitts, the Criterion, Framwellgate Bridge, was charged with selling elderberry-wine which according to the certificate of Mr. Pattinson, public analyst at Newcastle, contained no elderberry-juice, and was chiefly a solution of sugar flavoured with cloves, and containing salicylic acid. Mr. Turnbull, for the defence, said Mr. Colpitts had had his portion of the sample analysed by an eminent chemist—one of the best they could get in London—who certified that the wine was genuine, and contained about 20 per cent. of spirit. He asked that the third sample might be sent up to Somerset House for analysis. That course the Bench agreed to.

LIME-WATER.

At the Watford Petty Sessions on June 27, Boots (Limited), Farringdon Road, E.C., were summoned for selling lime-water certified by the analyst to be 25 per cent. deficient in lime.

Mr. W. G. Rushforth, the inspector who prosecuted, said the defendant company are chemists and druggists in the town, and have shops all over the country. On May 28 through his assistant he purchased a pint of lime-water from the shop in Watford. He put in the county analyst's certificate, and added that he did not suggest that the defendants had committed fraud; he regarded the case more as one of negligence, and thought a large company like Messrs. Boots might adopt some means of seeing that their drugs were kept up to the required standard.

The Chairman (Mr. J. F. Watkins): My experience is that there are drugs and drugs. One chemist supplies you with drugs that are up to the mark, and another supplies you with drugs that are not.

Mr. W. H. Leese, for the defence, said no one was more alive to the necessity for drugs being up to the proper standard than Messrs. Boots. They were a large company with over three hundred shops in various parts of the Kingdom, and they kept a large number of analysts who analysed the drugs in the various shops from time to time.

Mr. Rushforth, replying to the Chairman, said lime-water was sold at 2*d.* per pint.

The Chairman: So if the 300 shops sold only a pint a day there would be some gain to the company with a deficiency of 25 per cent. of lime in the water.

Mr. Leese pointed out that in the analyst's certificate there was a statement to the effect that the lime-water in the condition it was was not dangerous to health. He explained that the lime-water for about seventy or eighty of the southern shops was mixed at one large storage, and as soon as there was a question as to its strength, the whole of the lime-water was withdrawn from all these shops. It was examined, and in every case it was up to the required standard. Of the several dozens of bottles withdrawn from Watford, only one bottle was found to be under strength. He could only account for this by the mixer probably not being so careful as he ought to have been. The mixing of lime-water would now be on a different scale. It would be mixed by one chemist and tested by another, so as to avoid any possibility of its being under strength.

The Bench inflicted a nominal fine of 1*l.*, and costs.

WHAT IS PORT WINE?

At the Durham County Police Court, on June 29, Messrs. R. White & Sons, of London and elsewhere, trading as Kop's, brewers, were summoned for giving a label which falsely described the article sold. Mr. Scott Elder, chief inspector under the Acts to the County Council, prosecuted, and stated that the case arose out of a sample of port wine which he obtained from Mr. Strong, chemist, Langley Moor. The public analyst reported that the sample was entirely composed of syrup artificially coloured with coal-tar dye, and contained 3.1 gr. of salicylic acid per pint. The issue in the case was clearly whether the label on the bottle was true or false.

Mr. Simey, barrister, for the defence said: My point is that it is not called port wine.

Mr. Elder: In the first place Mr. Strong ordered certain wines.

Mr. Simey objected. The only point was whether the label was false.

Canon Greenwell (a magistrate) : It is not called port wine, but port flavour. It might be water made to taste like port wine.

Mr. Simey : The only offence alleged in the summons is that it is called port wine when it is not port wine.

Canon Greenwell : I think the objection is valid. The label does not say port wine, but port flavour. Anything is wine. You cannot define wine. The Bench could not convict on the summons.

Mr. Scott Elder : The label says that it is extra quality, unfermented fruit wine, but in this bottle there never was any fruit at all, not even the juice of fruit.

Canon Greenwell : I have a very strong view about these adulterations, but I don't think we can take action in this case under the circumstances of the summons.

Mr. Scott Elder : When you say it is made from fruit and it is not fruit, the label is wrong.

Mr. Simey : I object. That is not charged in the summons.

Canon Greenwell, after looking at the invoice from the defendants to Mr. Strong, said it charged him for six dozen assorted wines. What did that mean? Wine meant anything. They must be guided by the law, and he did not think they could convict.

Mr. Scott Elder : Then you will allow anything to be sold for port wine?

Canon Greenwell : I won't say anything more about that. I only say that, under this summons, we cannot possibly convict.

Mr. Elder asked the Bench to state a case, and the Chairman remarked that he thought the summons had been wrongly drawn, and that a summons might have been issued to cover the case.

The case was then dismissed, without costs.

There was a second case against the same defendants, but Mr. Scott Elder asked for an adjournment, which was agreed to, as was also a case against Albert Harding, Langley Moor.

AMMONIUM CARBONATE.

At the Court-house, Great Malvern, on Wednesday, June 29, Mrs. Margaretta Clark, carrying on at Church Street, Great Malvern, a chemist's business as an executrix, was summoned under Section 6 of the 1875 Act for selling ammonium carbonate under the British Pharmacopœia strength. Mr. Southall (Town Clerk of Worcester) prosecuted, and Mr. W. S. Glyn-Jones (instructed by Messrs. Neve, Beck & Kirby) defended.

Mr. Southall, in opening the case for the prosecution, said that *Dickins v. Randerson* laid down that if a drug is to be found in the British Pharmacopœia it must be sold in accordance with the Pharmacopœia standard. In this case the analyst had given a certificate showing the article to be deficient in ammonia. The Act states that "drug" includes every article used externally or internally as a medicine.

Police-Constable Ashford stated that on May 9 he purchased 4 oz. of ammonium carbonate for which he paid 4d. Sergeant Cox came and divided the sample. Cross-examined, witness said the assistant asked him whether he wanted lump or powder, and he said lump. He knew that it was used for different purposes, but he could not say what purposes. He had never taken it as a medicine or heard of anyone who had done so. If he wanted it for cleaning-purposes, he would buy it from a chemist. If he wanted resin, saltpetre, or soft soap, he would go to a chemist for it.

Sergeant Cox was then called, and proved the division of the sample. The public analyst reported on May 28 as follows :

I am of opinion that the said sample is not of the strength required by the British Pharmacopœia. This opinion is based on the facts that the sample required only 13 c.c. of a volumetric solution of sulphuric acid to neutralise 1 gram, whereas a gram of ammonium carbonate of British Pharmacopœia strength should require for neutralisation at least 18.7 c.c. of the volumetric solution of sulphuric acid.

Observation.—No change had taken place in the constitution of the article that would interfere with the analysis.

Cross-examined, witness said he had used ammonia for cleaning clothes, and would buy it from a chemist. He

believed it loses strength by keeping. The bottle produced (a screw metal-capped bottle) was provided by the county authorities. He knew that instructions had been issued by the Local Government Board for taking samples. Mr. Glyn-Jones read to him the following instruction contained in a letter issued by the Local Government Board in February, 1894 :

The reserved portions of such samples as butter and lard should, as soon after purchase as possible, be placed, without paper (since paper acts as an absorbent), in a dry, wide-mouthed stoppered bottle or in an earthenware jar, securely corked so as to exclude the air.

He considered the capped bottle a stoppered bottle, as it excludes air. By instruction of the Superintendent, he took a second sample on May 20 before he had received the certificate of the May 9 sample. He did not know whether the analyst had desired it or not, but admitted that it is exceptional to take a second sample. He had received a certificate in regard to the second sample. Asked to produce it he said he had returned it, but stated that the sample was genuine.

Mr. Glyn-Jones : I see. You returned it because the sample was genuine, and you know it was genuine because you returned the certificate; and that is all you can tell us about it?—Yes.

Mr. C. C. Duncan, the public analyst, said he received the sample on May 10. His analysis showed it to be deficient to the extent of 70 per cent. He could not recommend such a sample for pharmaceutical purposes. The carbonate, he added, is used for making sal volatile and smelling-salts.

Cross-examined, witness said sal volatile is made by manufacturing chemists and experts, but not by the general public. Liquid ammonia is used for cleaning. He did not know the public use the lump for that purpose. He considered the B.P. the standard for ammonium carbonate, but not for everything contained in it. Counsel put questions to witness as to lard, beeswax, and starch, with the object of showing that the public buy these articles from chemists for other than medicinal purposes. When articles that are in the B.P. are purchased for analysis they should, he (witness) considered, comply with the B.P. requirements. He assumed that every sample sent to him under the Sale of Food and Drugs Acts was a food or a drug. If the article was in the B.P. he would apply the B.P. test to it. The ammonium carbonate he had analysed had answered to the B.P. description, but it had decomposed and did not comply with the B.P. test for strength. He admitted that the B.P. allowed superficial efflorescence and that it should be scraped before dispensing. In further cross-examination counsel emphasised the fact that the B.P. requires the scraped carbonate to be analysed, and witness stated that his sample was not scraped, as it had no unchanged core. Counsel further put to witness statements by Greenish, Squire, and White that the B.P. standard for ammonium carbonate is too high. Witness admitted that complaints had been made in regard to the standard.

Mr. Glyn-Jones, in opening the case for the defence, said there were several reasons why the prosecution must fail. Firstly, in *Fowle v. Fowle re beeswax*, it was clearly decided that, though an article is in the Pharmacopœia, it is not necessarily a medicine, and it is for the Magistrates, considering the circumstances of the purchase, to find as a fact whether a particular sale is that of a drug or not. The evidence for the prosecution had shown that the main uses for ammonium carbonate by the public are for purposes not medicinal. It is quite clear from the Act, he continued, that an article cannot be both a food and a drug, and the prosecution in this case had chosen to regard it as a drug, and in that he asked the Magistrates to say that they were mistaken. His friend had relied on *Dickins v. Randerson*, but before that could be applied the Magistrates would have to come to the conclusion that the article was bought as a drug. Further, in *Hudson v. Bridge* it was laid down that there must be a statement in the B.P. of the strength of the article when sold. The analyst in this case had admitted that the test he relied upon was the test of the article when the efflorescence had been scraped off, but the B.P. only orders the efflorescence to be scraped off when the chemist uses it

for dispensing. There is, therefore, no definite standard in the Pharmacopœia for the amount of ammonia this article should contain when sold to the public. Finally, counsel argued that the Act provides safeguards for the defendant. The inspector was bound to provide a sample for the defendant's analyst to check the prosecutor's figures by, and also to retain a sample to be sent to Somerset House if there should be a dispute. He maintained that the sample in this case had not been properly packed, and the inspector admitted that he did not comply with the instructions issued by the Local Government Board. This alone should suffice for dismissal of the summons.

Witnesses for the defence were then called. Mr. William Johnston, Ph.C., Brixton, deposed that there are two kinds of ammonium carbonate, re-sublimed and commercial. The commercial was what he would sell for ammonium carbonate. It is principally used for cleaning: he had never sold it to the public as medicine. He spoke of the efflorescence to which it is liable, and produced two screw-cap bottles, into one of which on June 8 he had put pieces of translucent carbonate. It then required 18.5 c.c. of normal sulphuric-acid solution to neutralise a gram. On June 27 he found it had lost ammonia and effloresced, and only required 12.7 c.c. for neutralisation. On June 8 he had put 2 dr. of ether into a similar bottle, and in a few days it had entirely evaporated.

Witness was cross-examined, and when he was asked what ingredient of the carbonate is useful for cleaning, and whether the effloresced is as good or not, Mr. Glyn-Jones objected, and stated that the strength of the article for cleaning purposes was not material to the case. The charge was of selling a drug.

By the Magistrate: The price charged in this case would indicate the commercial quality. The carbonate might go down from 15 or 17 to 13 c.e. in two days.

Mr. Alfred Mander, Ph.C., F.C.S., Malvern, also deposed that both kinds of carbonate are stocked. The re-sublimed is for dispensing, and he never sold it to the public. The test in the Pharmacopœia was for the scraped article, and necessarily for the re-sublimed.

In reply to the Magistrates' Clerk the public analyst disagreed with this and read the full test in the Pharmacopœia.

Mr. Glyn-Jones said he would not be allowed to cross-examine the public analyst on his statement, but he put it to the witness that the test in the Pharmacopœia about absence of tarry matters necessitates re-sublimation. Witness agreed that the commercial is liable to be contaminated with tar, and the object of re-sublimation is to get rid of it. Cross-examined, he said there is no standard for the commercial. He sells commercial at 1d. per oz., but does not sell the re-sublimed.

Re-examined: He thought that many of his customers would feel insulted if they were asked to what use they were going to put the article they were purchasing.

Mr. A. C. Wootton, Ph.C., London, corroborated what the other witnesses had said about the use of ammonium carbonate. He had never sold it for medicinal purposes, and he could not conceive that a person asking for 4 oz. of lump ammonium carbonate could want it for medicinal purposes.

Cross-examined: If a customer asked for a pennyworth or 4 oz. he would not think of asking him which he wanted. If a customer asked for so many grains or a dram, or gave some indication that it is for medicinal purposes, he might then have thought it worth while to ask, but he had never known of such a case.

Mr. A. O. Holbeche, M.R.C.S., L.R.C.P., Great Malvern, said the public do not buy ammonium carbonate for medicine, but for cleaning. It is far too powerful to be used by the public for medicinal purposes. If ordered in a prescription, the B.P. article would be supplied.

Cross-examined: If he went into a shop and asked for ammonium carbonate without saying he was a doctor, he would expect to be supplied with the commercial.

Mr. Glyn-Jones said he did not know whether the Magistrates would care to hear further evidence. Mr. Clarke, qualified manager of Mrs. Clarke's business, was present, and so was the assistant who served the inspector. He had other chemist witnesses from Malvern, who would all speak to the same effect.

The Magistrates said they did not desire to hear further evidence.

Mr. Southall, in replying on the case, said that it differed from the beeswax one, for here the witnesses for the defence admitted that ammonium carbonate is a medicine as well as a commercial article, and he contended that if a chemist sold a drug in the Pharmacopœia asked for by its proper name he was not entitled to sell anything but the Pharmacopœia article. The witnesses all seemed to think the onus of indicating that they want the correct thing rests upon customers. With that he could not agree.

The Chairman, in giving the Magistrates' decision, said they had gone into the question very thoroughly, and were unanimously of opinion that the article in question was not, under the circumstances, purchased as a drug, and that there is no standard for ammonium carbonate when sold commercially.

Mr. Glyn-Jones asked that costs should be allowed for the defence. He said it was an important question, and it involved a good deal of expense upon the defence. No information had come out in the case which had not been known to the prosecuting authorities before they took proceedings. It would be unfair to Mrs. Clarke that she should be mulcted in the expense of the defence.

The Magistrates said that under all the circumstances they did not see their way to grant costs.

Bankruptcy Report.

Re HAMOR LOCKWOOD, formerly managing director of the Park Road Chemical-works, Phillips Park Road, Manchester; the Bradford Chemical-works, Bradford (Manchester); and also trading as Lockwood & Co., Chemical-works, Miles Platting.—At the Manchester Bankruptcy Court on June 27, before Mr. Registrar Atkinson, the public examination of this debtor was conducted by Mr. Dibb, the Official Receiver. Debtor had sold his business in 1901 to "Hamor Lockwood & Co." for £73,265., payable as to £9,993. by the allotment of fully paid-up shares in the company; as to 10,007. by the issue of 10,000. of debentures to the company (subject to a prior-charge debenture for 10,000.) and 7. in cash; and as to the balance, by the company's paying all the liabilities in relation to the business. Within a year the company went into voluntary liquidation. The debtor said he sold his business because he was unable to pay his debts and unable to carry on his business for want of capital. It proved to be a "one-man" company, although he had not expected it. Apart from the vendor's shares, only seven shares were issued—one to each of the signatories to the memorandum of the articles of association. These seven were six friends and himself. He had done what he did believing it was best for his creditors and for himself. The liabilities are scheduled at 650/., without any assets. The examination was adjourned.

Deeds of Arrangement.

Ferris, James, trading as "James Ferris & Co." Regent Street, Newtownards, co. Down, druggist and general bottler. Arrangement for the payment of a composition of twenty shillings in the pound, to be paid in three equal instalments at three, six, and nine months from the date of confirmation of petitioner's offer by the Court; second and third instalments to be secured by the joint and several promissory notes of petitioner and a solvent surety. Date of filing petition, April 26; date of confirmation order, June 20; filed, June 22.

Rhead, Alfred, 2 Hamstead Road, Handsworth, chemist. Trustee, George A. Goodway, 79 Soho Hill, Handsworth, accountant. Date, June 16; filed, June 23. Secured creditors, 9/.; unsecured liabilities, 332/., 15s. 11d.; estimated net assets, 168/., 16s. 8d. The following are scheduled as creditors:

	£	s.	d.
Allen & Hanburys (Limited), London	11	0	0
Hearon, Squire & Francis, London	16	0	0
Rhead, T. G., Stoke-on-Trent	40	0	0
Southall Bros. & Barclay, Birmingham	37	0	0
Taylor, A., Birmingham	35	0	0
Topham, J., Fenton	50	0	0
Wyleys (Limited), Coventry	43	0	0
Rates and Taxes	12	0	0

New Companies & Company News.

H. S. MARTIN (LIMITED).—Capital 10,000/-, in 1/- shares. Objects: To acquire the business formerly carried on by H. S. Martin, and recently by W. Carter, at 30 and 32 High Street, East Grinstead, Sussex, to adopt an agreement with the said W. Carter, and to carry on the business of chemists, druggists, drysalters, herbalists, mineral-water manufacturers, oil and colour men, importers and makers of and dealers in chemicals and apparatus for electrical, photographic, and scientific purposes, &c. The first subscribers are: W. Carter, 30 and 32 High Street, East Grinstead, chemist and mineral-water manufacturer; Mrs. C. Carter, Mount Pleasant, Anglesea Road, Ipswich; W. H. Hills, Lansdowne House, London Road, East Grinstead, journalist; Mrs. E. S. Martin, 5 Compton Avenue, Brighton; C. Umney, 49 Southwark Street, S.E., wholesale druggist; P. Harrower, 134 Bath Street, Glasgow, East India merchant; and H. S. Martin, 5 Compton Avenue, Brighton, retired chemist. No initial public issue. The first directors are W. Carter, H. S. Martin, C. Umney, and W. H. Hills. Qualification (except first directors), 100/- shares or debentures; remuneration (except managing director), one guinea each per board-meeting attended. Registered office, 30 High Street, East Grinstead.

D. MASON & CO. (LIMITED).—Capital 5,000/-, in 1/- shares (500 5 per cent. cumulative preference). Objects: To adopt an agreement with W. A. H. D. Mason for the acquisition of the business carried on by him at the Minerva Chemical-works, Lawley Street, Dudley, as "D. Mason & Co.," and to carry on the business of manufacturers and factors of and dealers in bleaching and other sodas, dry, hard, and soft soaps, furniture-polishing creams, metal-polishes, drysalteries, chemicals, and toilet-requisites, oil-refiners, candle-makers, manufacturers of perfumes, pharmaceutical, manufacturing, and general chemists and druggists, manufacturers of wood and tin boxes, bottle and case manufacturers, &c. The first subscribers are: W. A. H. D. Mason, Hinley Street, Dudley, soap-manufacturer; W. S. Evans, 38 Grange Road, Dudley, coachbuilder; H. D. Mason, 11 Nelson Road, Dudley, soapworks-manager; H. C. Evans, 42 Sheppington Street, Dudley, coachbuilder; S. T. Mason, 32 Edmund Street, Dudley, traveller; A. W. Mason, Hinley Street, Dudley, traveller; and Mrs. I. A. Evans, 38 Grange Road, Dudley. No initial public issue. The first directors are W. A. H. D. Mason (chairman and permanent director), W. S. Evans, and H. D. Mason; qualification, 100/-; remuneration, as fixed by the company. Registered offices, Minerva Chemical-works, Lawley Street, Dudley.

A. J. WHITE (LIMITED).—The directors have declared a dividend on the preference shares at the rate of 6 per cent. per annum for the quarter ending June 30.

DRUG-STORE SHARES.—At a sale of shares at Leeds on June 28, 25s. each was realised for fifty fully-paid 1/- ordinary shares in Taylor's Drug Company (Limited).

HUGH MOORE & ALEXANDERS (LIMITED), DUBLIN.—The directors have declared a dividend at the rate of 5 per cent., less income-tax, for the year ended March 31, 1904.

APOLLINARIS & JOHANNIS (LIMITED).—The directors, at their meeting on June 30, after writing off the entire amount expended for advertising during the past year, resolved to recommend a final dividend of 5 per cent. on the ordinary shares, making 5 per cent. per annum for the year ending March 31 last. They further recommend placing 20,000/- to the reserve, as last year, leaving 11,381/- 1s. 11d. to be carried forward, as compared with 8,216/- 17s. 6d. carried forward last year.

MELLIN'S FOOD (LIMITED).—The ordinary general meeting of shareholders was held at the offices of the company, Stafford Street, Peckham, S.E., Mr. E. C. Bliss (chairman of the company) presiding. The Chairman, in moving the adoption of the report, stated that the income derived from the American royalties was more than sufficient to pay a dividend of 6 per cent. on the preference shares. The sum of 18,500/- carried forward last year has been written off, and the suspense account has been reduced by upwards of 4,000/. The directors proposed a dividend on the ordinary shares of 6 per cent. per annum. The motion was unanimously adopted.

PHILLIPS & CO. (LIMITED).—The nineteenth annual general meeting of the shareholders of this company was held on June 8 in Oriental Buildings, Bombay, Mr. S. Armstrong presiding. The directors' report for the year ended February 29 was presented for adoption. In the report the directors state that the result of the year's working is satisfactory. The balance at profit-and-loss account, including Rs. 9,695 13a., 11p., brought forward from last year's account, amounts to Rs. 47,933 13a., which the directors propose to apply as

follows: To dividend at 7½ per cent., Rs. 15,000; to depreciation of Poona premises, Rs. 2,500; to depreciation plant, Bombay, Rs. 850; to depreciation plant, Poona, Rs. 500; carried forward to next year's account, Rs. 29,083 13a.; total, Rs. 47,933 13a. The directors consider it necessary to carry forward a sum large enough to admit of the stock being kept up to a better standard, whereby they think the business will benefit. The loan account has been reduced this year by Rs. 5,000. The reports and accounts were adopted. Resolutions were passed by the meeting declaring a dividend at the rate of 7½ per cent.; re-electing Mr. S. Armstrong and Mr. Shivram V. Darbarkar directors on the board; appointing Messrs. A. F. Ferguson & Co. auditors in Bombay, and Mr. Palooji Nasarwanje auditor in Poona, at a remuneration of Rs. 200 and Rs. 100 respectively; and voting a bonus of one month's pay to the company's employés.

Business Changes.

Properly authenticated business notices (not being advertisements) are inserted in this section free of charge if promptly communicated to the Editor.

THE TIMOTHY WHITE COMPANY will shortly open a branch pharmacy at Northdown Road, Margate.

MR. GEO. YEATS, late manager to Lewis & Burrows, Earl's Court, S.W., has purchased the business of Mr. H. A. Hedges, 71 East Hill, New Wandsworth, S.W.

MR. J. WALTON, chemist and druggist, is opening The Broadway Pharmacy, opposite the railway station, Broadcasters, as soon as the necessary fittings are completed.

MR. G. W. BEARDSELL, formerly of Brixton, Wimbledon and Streatham, has opened a drug-store at 35 Rathbone Street, Canning Town, E.

MR. C. R. STEDMAN, chemist and druggist, has taken over the business at High Street, Rotherfield, Sussex, formerly carried on by Mr. G. W. Smithson.

MR. W. H. HAWKER, chemist and druggist, has purchased the business at 129 Gloucester Road, Bristol, for many years carried on by Mr. J. J. Burnett, chemist and druggist.

A NEW DRUG-STORE, under the management of Mr. O. M. Ellis, chemist and druggist, will shortly be opened at 397 Woodborough Road, Nottingham, under the title of the "Mapperley Cash-Chemists."

OWING to town improvements Mr. T. J. Barton, chemist, Bridgwater, will shortly remove from 29 Cornhill to the old Post-office, High Street. The new premises will be entirely refitted, electric light installed, and a photographic department with dark-rooms, &c., will be added.

Coming Events.

Notices for insertion under this heading should be received by the Editor on Wednesday of each week.

Wednesday, July 6.

Pharmaceutical Society of Great Britain, 16 Bloomsbury Square, W.C., at 11 A.M. Council-meeting.

Pharmaceutical Society of Ireland, 67 Lower Mount Street, Dublin, at 3 P.M. Council-meeting.

Plymouth, Devonport, and Stonehouse Chemists' Association. Annual excursion. It is proposed to go to Yealmpton by railway-motor, and then by carriages to Flete and Mothecombe Bay. High tea will be taken at Yealmpton, and the Kitley caves are to be visited during the evening. Mr. F. A. Spear, 68 Old Town Street, Plymouth (Hon. Secretary), is supplying inclusive tickets at 5s. 6d. each, but application must be made not later than July 2.

Newcastle-on-Tyne, Chemists' Association. Annual picnic (in conjunction with the Sunderland Chemists' Association) to Lambton Park. Tickets, exclusive of fare, 3s. each. The conveyance will be either by brake or train according to the weather, the fares being 1s. 6d. and 1s. 3d. respectively. The Hon. Secretary, W. Pescod, 19 First Avenue, will supply tickets and further particulars.

Thursday, July 7.

Rontgen Society, 20 Hanover Square, W., at 8.30 P.M. Annual meeting.



TO CORRESPONDENTS.—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects of general interest.

"Makes Kissing a Pleasure."

SIR.—We note with pleasure the "Observations and Reflections" on our recent phrase competition with which "Xrayser" has been good enough to favour us in your current issue. It may be mentioned that "Xrayser" is by no means singular in backing his phrase against the one selected by us as the winner of the first prize; we have received many communications written in a similar vein, although not of the osculatory and presumably pleasing character of that of "Xrayser." As you are aware, it is impossible to please everybody, and if the character of the replies did not come up to our expectations, we are the chief sufferers. We had to decide upon one of the phrases as the best suited for our purpose, and we wished at the same time to avoid the fate that befell the man and his quadruped in the fable.

Yours faithfully,
OPOL CHEMICAL WORKS.

26 Southwark Bridge Road, S.E.,
June 23.

Chemists' Almanacs.

SIR.—In your report of the case *Hudson v. Clear*, it is stated that I was unwilling to pay for about 14 pages of my own advertising-matter. This was not the case. The facts were briefly as follows: Messrs. Hudson's representative called on me about August or September last, soliciting orders for their Chemists' Almanac. After a good deal of persuasion, I decided to have 1,000 copies, and signed their usual slip, agreeing to pay their usual price—7s. 6d. per 100 for almanacs—also so much per page for my own advertisements. Several specimens were shown me; I selected one, pasted fourteen of my own adverts in, and forwarded to them as copy. This almanac also contained a few pages of simple directions for "Ailments" such as "Mumps," "Convulsions," "Teething," &c. A short time before Christmas, 1903, Messrs. Hudson's manager called on me and stated the "Ailments" would have to be paid for as advertisements. This I declined to do, as nothing was said about them being paid for when the order was given. About Christmas I wrote the firm saying, that if they could not supply by January 1, they had better cancel the order, as I wished to have the almanacs delivered to my customers by that date; I had no reply, and on January 13 the 1,000 almanacs were delivered, with thirteen out of fourteen of my own advertisements omitted, as well as the "Ailments." I immediately returned them. A few days later I received a solicitor's letter requesting payment by return, &c. Naturally enough I did not comply with this request. It would be interesting to know if many other chemists have been treated in a similar way. Faithfully yours,

Leicester, June 28. H. W. CLEAR.

Romans, Law, and "Xrayser."

SIR.—It is not often that one can take serious exception to the words falling from the pen of your able correspondent "Xrayser," but I cannot think he is serious in what he writes about the legal and medical professions—or if he is, then I must join issue with him. It is hardly worth arguing over the age of the two—Moses was a lawgiver; primitive laws are as old as primitive medicine, and there were jurists 1,800 years ago whose reputations as scientific lawyers were and still are as good as those of our best lawyers to-day, whilst medicine was a mixture of empiricism and quackery. Perhaps it is true that the evolution of the hired advocate is modern, but why? Simply because of old the law was, with the sword, the read to honour rather than fortune. The vivid pictures of a Roman lawyer's practice which abound in Latin literature

tend to show the estimation in which the Roman people held the legal reputation of its favourites. Cicero's speech "Pro Muræna" shows that the reverence of the masses for forensic success was apt to be excessive. These are but trifles, however, compared with the statement that "the causes of the development of the profession were in fact identical with those to which the decline and fall may be traced." From the age of Trajan and the Antonines, when the Roman monarchy had attained its full strength and maturity, a gradual decline, culminating in the subversion of the Western Empire, took place. But under Hadrian, the great jurist Caius, and under Marcus Aurelius the transcendental genius Papinian (who, by the by, was sent to England and became prefect of York for a time), flourished. The other leading jurists of this period were Paulus, Ulpian, and Modestinus. These five great jurists had written the leading treatises on the Praetorian edict, and it was in the very early period of this great era that Roman jurisprudence reached its highest limit. After the death of Modestinus its lustre steadily declined. The temporary restoration to splendour of the Eastern Empire is coincident with the promulgation of Justinian's codes, based almost entirely on the work of the above-named earlier jurists. The absolute converse of "Xrayser's" statement is true—that the most brilliant periods of Roman jurisprudence are coincident with the most brilliant periods of greatness of the Roman Empire.

Yours, &c.,

208 High Street, Borough, S.E.,

E. J. PARRY.

June 27.

Letters in Brief.

SO SAY ALL OF US.—A subscriber renewing (22/5) says: "THE CHEMIST AND DRUGGIST is the best value I can get in literature."

SOCIETY OF CHEMIST-OPTICIANS.—*Mr. Julius Caesar*, 49 Chippenham Road, W., writes in regard to our report of the meeting of chemist-opticians (C. & D., June 11, page 923) that he did not mention the term "pharmaco-optical" in the discussion on Mr. Higgs's motion that the Society should be called the "Oculoptical Society." Mr. Caesar's objection to the word "oculoptical" was that it might be construed by opticians as an encroachment on their title—"pharmaco-optical" would have been a better construction.

RETAIL AND WHOLESALE PRICES.—*Handicapped* (176/33) says what "Licourice" advises is precisely what he and others cannot do. His trade is too small to split up his orders or to order in quantity; and the possibility of improving it is frustrated by the exorbitant wholesale prices charged. Another evil is the cost of carriage. Recently he had photographic goods to invoice-value of 7s. 6d., and the carriage was 1s. 11d.—problem: find the profit.

Legal Queries.

Labels to be marked "Liable" or "Not liable" to medicine stamp-duty should be sent to the Editor in duplicate and with a stamped and addressed envelope for return of the marked ones, if desired.

173/7. Mikado.—Your nursery hair-lotion is not liable to duty, as it mentions no ailment.

173/31. J. M.—The sale of wine-essences is not affected by the case to which you refer. We do not consider that cayenne in ginger-wine essence is an adulteration, or that the use of artificial essences in making raspberry-wine essence is an offence under the Sale of Food and Drugs Act. You cannot be wrong in labelling such preparations "Prepared with synthetic essences."

173/56. Hwang Hai.—It is certainly the rule of the drug-trade to give a holiday of a week or a fortnight yearly without deducting the salary, but we do not think this can be enforced upon a medical man. Your best plan is to resign the appointment, *pro forma* if desirable, and stipulate on re-engagement for a holiday within a period to suit you.

Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but can not guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months.

172/31. L. P. S. I.—You seem to be unaware that it is "bad form" for a magistrate to adjudicate in a case in which he is personally interested.

276/10. *Benzole*.—You are mistaken in supposing that benzine is made from benzoline by a chemical process: it is one of the products of the distillation of crude naphtha. Crude petroleum yields naphtha (10 per cent.), refined petroleum (75 per cent.), and residuum. The naphtha on re-distillation yields rhigolene or cymogene, sp. gr. 0.630 (used sometimes as a local anaesthetic); gasoline, sp. gr. 0.642 to 0.648; benzoline, sp. gr. 0.692 to 0.709 (for spirit-lamps); and benzine, sp. gr. 0.731 (for solvent-purposes).

168/67. *A. E.* writes: "I have a fox terrier, four years old, which is gradually going blind. The sight of one eye is gone; the other is only affected, but seems to be getting worse. The blindness came on after an attack of influenza last winter. I should like a hint as to the treatment of the other eye." ["Going blind" may be due to several causes, but in this instance it is most likely a case of mal-nutrition (as a result of influenza), and that the vitreous humour is losing its transparency, while the anterior chamber remains clear. Such cases are not very hopeful, although the age of the dog is in its favour. The best treatment is iodine-saturation. While the cloudiness consists of fluid, absorption is always possible; but when once organised, nothing will affect it. Give 1-gr. doses of pot. iodid. for a month, then increase to 3 gr. for two months more, if you see any improvement. Dogs tolerate iodine-preparations better than was formerly supposed, but a long course may render the animal unfit for breeding.]

172/32. *Staff*.—The method for **Removing Tattoo-marks** from the skin is given in "Pharmaceutical Formulas," Vol. I. The process in which nitric acid is employed is too long to repeat here.

172/37. *E. P.*—**Spectacle-makers' Examination**.—The article on the spectacle-trade in the *C. & D. Diary*, 1900, only dealt with the practical side of the question. For the S.M.C. examinations the candidate is required to go deeper into the theoretical considerations that govern the correct adaptation of lenses to the eyes. The books you mention are too old to be of much use in preparing for the examination. You will find a list of recommended books in the syllabus of the S.M.C. examinations, which can be had from Colonel Davies Sewell, Temple House, Temple Avenue, E.C.

172/32. *Cato*.—The **Discoloration of Skin** through a course of nitrate of silver is permanent. It is possible that some medical men do not realise this disfiguring result of ordering silver pills, and certainly most of the patients would prefer the disease to the disfigurement.

170/19. *Photo*.—**Reduction of Formate Toning-bath**.—The remedy for the premature reduction of the gold in your formate toning-bath is slightly to reduce the proportion of formate of soda.

225. *W. F. T.*—**Crataeg**, used by homœopaths, is the tincture of the ripe fruit of *Crataegus Oxyacantha*, the Hawthorn. It is a heart-tonic in 5-drop doses.

172/69. *Student*.—You should consult with some personal friend in regard to the selection of a school at which to study.

168/66. *Quinine*.—There are no papers with the titles you give.

13/5. *T. A. A. E.*—We do not supply samples of remedies, you will find all that you want in the way of formulæ in "Pharmaceutical Formulas."

174/57. *Dental*.—You will find such a formula as you require for dentifrice-water in the *C. & D.*, March 26, page 515.

170/12. *Buchu*.—Tincture of cudbear (cudbear 1 oz., alcohol and water of each 4 oz., percolate) makes a suitable colouring-agent for an acid mixture such as you indicate.

Information Wanted.

Postcard replies to any of the subjoined inquiries will be esteemed.

176/63. Who makes "Barberly" self-toning paper?

176/64. Makers of fine black elastic.

175/10. Makers of the "Pazo" tablet-machine.

171/31. Who are the makers or agents for gold enamel marked "O. R. O." on the box?

Trade Notes.

THE PROPRIETORS of BOVRIL inform us that they are to repeat the bonus picture scheme next season, and that the coupons on all goods that may be in the hands of the trade when the present scheme closes will be allowed to rank for the future picture.

MERCK'S ANNUAL REPORT on the advances in pharmaceutical chemistry and therapeutics for the year 1903 has just been completed. It contains therapeutic notes on *materia medica*, classed under "preparations" and "drugs," and is a good digest of the papers and references to drugs that appeared in a selection of medical publications during last year. Chemists can obtain a copy of the "Report" free of charge by addressing Mr. E. Merck, 16 Jewry Street, E.C.

SYRUP OF VIOLETS prepared from *Viola tricolor* is a beautiful violet colour with a delicate aroma. Such a preparation can be made from the liquor *viola* conc., of which Bleasdale (Limited), of York, make a speciality. We have examined a sample of liquor made from this year's pansies, and find it quite satisfactory in all its physical properties. Diluted with syrup in the proportion of 1 to 15, a good syrup of violets is obtained; and in testing the limits of coloration we found ten drops give a distinct tint to a pint of water.

FOUR NEW TABLOIDS, of which Messrs. Burroughs Wellcome & Co. send us samples, seem particularly seasonable. Their composition is as indicated in the following formulæ:

Hydrarg. subchlor.	...	...	gr. ss., vel gr. j.
Sedii bicarb.	...	...	gr. iiiss., vel gr. v.
Hydrarg. c. cretæ	...	...	gr. ss., vel gr. ij.
Sedii bicarb.	...	...	gr. iiiss., vel gr. v.

At this season intestinal disturbances become somewhat frequent, and a small dose of a mercurial taken at the outset is quite in accordance with modern therapeutic teaching, the alkaline bicarbonate also helping.

"THE BUSINESS MOTOR," issued by Messrs. Newball & Mason, of Nottingham, has completed its first year, and we think it has fulfilled its mission of giving points to retailers. This month, referring to paragraph advertisements, the "Motor" says: "Five or six lines printed at the bottom of a column or interspersed with the news is much more productive of results than a two or three inch displayed advertisement. We are of opinion that the paragraph advertisement is not used nearly enough. Let a chemist try this means of advertising some preparation for which he has not much sale. He will be surprised at the result." The difficulty, of course, is to get the space for such advertisements. For example, a six-line space at the bottom of a *C. & D.* news column cannot be bought.

CHEMISTS' PRINTING.—From an examination of some hundreds of specimens of printing done by Messrs. Harrison & Waide, Kirkstall Road, Leeds, we are quite satisfied as to the ability of the firm to turn out good and original work. The enterprise of the firm is well shown in the large variety of designs they have submitted to us for cartons, labels, envelopes, posters, showcards, and counter-bills. The cartons or folding boxes are made in all sizes, to suit corn-cures, hair-restorers, cough-mixtures, photographic solutions, and lozenges. In the case of labels, showcards, and counter-bills the assortment is quite as large, while the envelopes are adapted for prescriptions, corn-plasters, tooth-brushes, seidlitz and headache powders, and a multiplicity of similar uses. Colour-printing is a feature of most of the samples, it being a speciality of the firm. This class of work is of a high standard of excellence, and chemists will find no difficulty in getting their ideas as to style intelligently carried out. Incidentally we may add that the samples show in a very striking manner the enterprise of chemists, the variety of special medicaments being quite bewildering.

A CONCESSION has been granted by the Spanish Government to allow sponge-fishing off the coast of Malaga.

COCOA-NUT OIL, applied hot to the cavity of the tooth, is used by the Chinese in the Kiungchow province as a cure for toothache.

Trade Report.

NOTICE TO BUYERS.—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, F.C., June 30.

THE stocktaking operations which mark the close of the half-year have interfered considerably with the ordinary course of business in drugs and chemicals, and consumers' wants have been mostly of a retail character. The principal alteration has been a reduction of $\frac{1}{2}d.$ in the price of quinine from makers, and values in the speculative market are also easier; the consumptive demand is almost *nil*, as is not unusual at this time of the year. Ipecac. has been in fair demand, and the market for East Indian has been cleared. Makers of sweet-almond oil have reduced their prices by 1d.; sandalwood oil meets with a fair demand, and clove oil is a shade easier, the price of the spice being lower. Values of peppermint oils keep steady, with only a retail demand. Petroleum oil is easier, and turpentine is unaltered. The bulk of the spices offered at auction was bought in. Jamaica ginger was flat, and the delivery-market for cloves has been quiet and easier. Saffron is lower. Canary-seed continues to advance, and coriander is firmer. Ordinary sulphate of copper is cheaper. The subjoined table shows the principal fluctuations of the week :

Higher	Firmer	Easier	Lower.
Canary-seed	Coriander-seed	Benzol	Mace
Pepper	Copper	Oil, almond	Oil, almond
Pilocarpine	Oil, pepper-mint (Jap. dementh., spot)	sulphate	Pet. oleum
		Nutmegs (W.I.)	(American)
		Oil, clove	Quinine (maker's)
		Potashes	Saffron

Arrivals.

The following drugs, chemicals, &c., have arrived at the principal ports of the United Kingdom from June 21 to 29 inclusive: Acetone (@ Stettin), 16 dms.; acid, boric (@ Italy), 21; acid, acetic, (@ Rotterdam) 80 ephys. 7 cks., (@ Fredrikstad) 400 demijohns, (@ Terneuzen) 60 pkgs.; acid, carbolic (@ Amsterdam), 125 cks.; acid, sulphuric (@ Amsterdam), 50 cks.; acid, tartaric, (@ Antwerp) 28, (@ Amsterdam) 8, (@ Bari) 8; aloes (@ Mossel Bay), 29; ammon. chlor (@ Hamburg), 23; annatto seed (@ Madras), 75; antimony (@ Shanghai), 901 cs.; argol (@ Naples), 153 cks.; arrowroot (@ Halifax), 50 kgs.; arsenic (@ Oporto) 22, (@ Hamburg) 5; balsam copaiba (@ Maranham), 4 brls.; birdlime (@ Kobe), 100 cs.; bleaching-powder (@ Hamburg) 193, (@ Uddevalla) 34 cs.; borax (@ Hamburg) 23, (@ Antofagasta) 3,400 bgs.; Calabar beans (@ W. C. Africa), 7; camphor (@ Hamburg) 275 cs., (@ Koke) 54 cs.; camphor oil (@ Koke), 300 cs.; canary-seed (@ Tangier), 44; cardamoms (@ Colombo) 156, (@ Calicut) 29, (@ Bombay) 16; cinchona (@ Mollendo) 100, (@ Calicut) 270 bgs. (@ Bombay) 95, (@ Amsterdam) 225; citrate of lime (@ Palermo), 146 cks.; cloves (@ Amsterdam), 100 mats; colocynth, 1; cochineal (@ Las Palmas), 11; cumin-seed (@ Mogador), 44; cuttlefish-bone (@ Marseilles), 27; cream of tartar (@ Barcelona) 12, (@ Tarragona) 10, (@ Bordeaux) 245; drugs (@ Yokohama) 10 cs., (@ New York) 378; ergot (@ Oporto), 19; fennel-seed (@ Bombay), 500; fenugreek-seed (@ Bombay) 134, (@ Casablanca) 300; galls (@ Bussorah), 555; gentian (@ Maisel's), 7; ginger (@ Bombay) 404, 3,393 bgs. 289 cs., (@ W. C. Africa) 721 bgs., (@ New York) 704, (@ Jamaica) 175, (@ W. C. Africa) 272; gums, unenumerated (@ Suez) 60 bds., and 252 bds. in *tr.*, (@ Bushire) 130 bgs. 124 cs., (@ Bordeaux) 106 bgs.; horey (@ Halifax, N.B.) 12 cks., (@ Wellington, N.Z.) 25 cs., (@ Gisborne, N.Z.) 20 cs., (@ Valparaiso) 100 brls., (@ Sydney) 100 cs., (@ Kingston) 194 pkgs.; insect-powder (@ Trieste), 55 pkgs.; ipecacuanha (@ Bremen), 8; jaborandi (@ Maran-

ham) 7, (@ Parnahyba) 14; juniper-berries (@ Leghorn), 50; kola (@ W. C. Afr.ca) 8; lemongrass oil (@ Madras), 34 cs.; lime-juice (@ Jamaica), 13 puns.; liquorice (@ Naples), 40 cs.; liquorice-root (@ Persian Gulf), 1,785 bds. in *tr.*; musk (@ Colombo), 1 box; nux vomica (@ Madras), 394 bgs. in *tr.*; oil, castor, (@ Calcutta) 250 cs., (@ Marseilles) 46 (@ Leghorn) 43 cs.; oil, cod-liver, (@ St. John's, Newfoundland) 16 cks., (@ Drontheim) 25 brls., (@ Aalesund) 97; oil, olive, (@ Bordeaux) 554 cs., (@ Leghorn) 160 cs.; oils, essential, (@ Messina) 143, (@ New York) 15 cs.; opium (@ Smyrna) 59 cs. and 96 in *tr.*, (@ Persian Gulf ports) 81; orris (@ Leghorn), 6; potash chlorate (@ Trepport) 20, (@ Gothenburg) 40; potash, caustic (@ Hamburg), 40 dms.; potash salts (@ Dunkirk) 226; quicksilver (@ Malaga), 10 flasks; quinine (@ Rotterdam), 5 cs.; rhubarb (@ Shanghai), 43 cs.; saccharin (@ Dantzig) 3, (@ Antwerp) 7; saffron (@ Valencia) 2, (@ Palermo) 1 case; sandarac (@ Mogador), 83; sarsaparilla (@ New York) 30, (@ Jamaica) 3; sal ammoniac (@ Amsterdam), 120 cks.; seedlac (@ Madras), 20; soy (@ Hong Kong), 336 cks.; spermaceti (@ New York), 50; sticklac (@ Madras), 6; sugar of milk (@ Hamburg), 10; sulphur (@ Catania), 1,191 pkgs. 50 tons; tartar (@ Naples) 10, (@ Rotterdam) 32, (@ Barcelona) 47; tartar emetic (@ Hamburg), 16 cks.; turpentine (@ New Orleans), 260 brls.; wax, bees, (@ Valparaiso) 28, (@ Talcahuano) 23, (@ Barcelona) 11 bds., (@ Rangoon) 11 cs., (@ Vizagapatam) 23 cs., (@ Jamaica) 16 pkgs.; wax, carnauba (@ Parnahyba), 223 bgs.; wax, cerasin (@ Hamburg), 30; wax, Japanese (@ Hamburg), 50; wine-lees (@ Messina) 375, (@ Bordeaux) 49; wood oil (@ Shanghai), 56 cks.

Cablegrams.

HAMBURG, June 30:—Sales have been made of 400 bags of carnauba wax at dearer prices. Refined camphor is also dearer, at 480m. per 100 kilos. Japanese pepper-mint oil is quoted at 12 $\frac{3}{4}$ m. per kilo., and for menthol afloat 30m. per kilo. is asked.

NEW YORK, June 30:—Quiet conditions prevail in the drug-market. An easier feeling is shown in opium, at \$2.63c. per lb. for single cases. Quinine has declined 1c. per oz., menthol is weak at \$4.75c. per lb., and an easy tone prevails in cascara sagrada, 7c. per lb. being asked for new bark. Refined camphor is rather lower, at 59c. per lb.; and for senega 60c. per lb. is asked, being weak.

Heavy Chemicals.

There is nothing of a striking nature to be recorded as regards matters in the heavy-chemical market. Business all round is moderately steady, but a heavier home-trade demand would be very welcome. In values there are no fluctuations of particular moment, nor do any appear imminent.

ALKALI-PRODUCT.—Caustic soda, ammonia, alkali, and salt-cake are all firm and moving fairly well. Soda crystals are steady, and the hotter weather has not so far appreciably affected supply. Bleaching-powder is quiet, and still offers at low figures.

SULPHATE OF AMMONIUM.—The steadier feeling has been maintained, with more actual business passing and a somewhat heavier all-round inquiry. Present nearest figures: Beckton 12*l.* 2*s.* 6*d.*, Beckton July to September 12*l.* 5*s.*, Beckton terms 12*l.*, London 12*l.* 2*s.* 6*d.*, Leith 12*l.* to 12*l.* 2*s.* 6*d.*, and Hull 11*l.* 17*s.* 6*d.* to 12*l.*

BICHLROMATES OF POTASH AND SODA are in fair request at unaltered rates. Bichromate of potash, English and Scotch deliveries, 3*d.* per lb., less 2*½* per cent., Glasgow, with export figure 4*d.* per lb. lower but net. Bichromate of soda, English and Scotch deliveries, 2*½**d.* per lb., less 2*½* per cent., Glasgow, and export 2*d.* per lb., net, f.o.b. Glasgow.

BARIUM-PRODUCTS are in about average all-round demand, while values are steadily maintained at recent figures. Chloride of barium, ordinary refined crystals, 5*l.* 17*s.* 6*d.* to 6*l.* 7*s.* 6*d.* per ton in large casks and 5*l.* 17*s.* 6*d.* to 6*l.* 2*s.* 6*d.* per ton in bags. Blane fixe, pure precipitated sulphate of barium in paste form, 5*l.* 10*s.* to 6*l.* per ton in 8 to 9 cwt. casks. Mineral sulphate of barytes, ground, in steady request at 40*s.* to 100*s.* per ton, according to quality, quantity, and package. Sulphide of barium, crude calcined, 70 to 75 per cent., 4*l.* to 4*l.* 10*s.* per ton in 7 to 8 cwt. casks. Hydrate of barium, purest crystals, 13*l.* to 14*l.* per ton in 6 to 7 cwt. casks; and fused product in drums, 12*l.* 10*s.* to 13*l.* 10*s.* per ton. Nitrate of baryta crystals 16*l.* 10*s.* to 17*l.* 5*s.* per ton, and powdered 16*l.* 15*s.* to 17*l.* 5*s.* per ton, in original casks.

Liverpool Drug-market.

Liverpool, June 29.

AFRICAN GINGER.—For a parcel at auction 19*s.* per cwt. in transit was bid and refused, 20*s.* being wanted.

BEESWAX (CHILIAN).—Forty sacks have been sold on private terms.

CALABAR BEANS.—Sales are reported at 4d. per lb. in store. **CAMPHOR OIL.**—White continues very scarce and is quoted 55s. to 57s. per cwt., c.i.f., for prompt shipment from Hamburg. Some near arrival is offering at 44s., c.i.f.

CANARY-SEED.—Dearer; 100s. per quarter is now asked for the limited stocks of Turkish on the spot, and River Plate has been done at 67s. 6d.

CASTOR OIL.—425 cases good seconds have arrived per s.s. **Tactician.** There have been further sales in store at 2½d. per lb. No further business for shipment has been reported. First-pressure French remains unchanged at 2½d. to 2¾d., at which there have been considerable retail sales.

COCONUT OIL.—French Cochin is advancing. There is practically none to be had on the spot, and 29s. 9d. per cwt., c.i.f., is quoted for shipment.

FENNEL-SEED.—Quoted at 12s. 6d. per cwt.

FENUGREEK-SEED continues firm at 8s. 6d. per cwt. in store.

HONEY (CHILIAN).—Seven barrels fine Pile X have been sold at 32s. 6d. per cwt., and 50 barrels, Pile 2 at 21s. 6d.

JABORANDI-LEAVES.—No bids were made for some small leaf up at auction; 8d. per lb. is talked of.

KOLA-NUTS.—Eight bags of dry have been sold at 3d. per lb. There have also been sales at 2½d.

LEMON OIL.—Messina essence has advanced to 2s. 4d. per lb., f.o.b.

LINSEED.—River Plate is rather firmer on the spot, at 32s. per quarter. Arrivals have not been so heavy during the last week or so.

LINSEED OIL.—Rather firmer, at 16s. 6d. per cwt., naked.

SULPHATE OF COPPER.—Rather weaker, at 20s. 15s. per ton.

German Drug-market.

Hamburg, June 28.

Hamburg was honoured to-day by the presence of the King of England, who also visited the Exchange, and was loudly cheered by the large assembly of merchants. King Edward addressed the company in German, and expressed his thanks for his reception.

Our drug-market is still quiet, business being on a limited scale.

AGAR-AGAR is quiet, prime being quoted 280 m., and current quality 250m. per 100 kilos.

ALBUMEN.—Chinese is a little firmer, at 385m. per 100 kilos.

CAMPHOR (REFINED) is firm, in first-hands at 460m. per 100 kilos., and second-hands quoted 450m.

CANTHARIDES.—Russian of the new crop is offered at 700m. per 100 kilos.

CASCARA SAGRADA.—For 5 tons on the spot 120m. is quoted, and for forward shipment 75m. per 100 kilos.

CUMIN-SEED.—Maltese is quoted 44m., and new Mogador 38m. per 100 kilos.

CITRIC ACID is steady, at 220m. to 225m. per 100 kilos.

FENUGREEK-SEED for shipment is quoted 13½m. to 14m. per 100 kilos.

ACCROIDES is firm, yellow being held at 60m. per 100 kilos.

IPECACUANHA is in better demand. Cartagena is obtainable at 93m. and Rio 103m. per kilo.

LYCOPODIUM is firm, at 630m. per 100 kilos.

QUININE has been reduced by the factories by 2m. per kilo.

SPERMACETI is quiet, at 200m. to 195m. per 100 kilos. for American refined.

WAX (CAENAUBA) is quiet, at from 273m. to 310m. per 100 kilos., according to quality.

WAX (JAPANESE) is dull of sale, at 107m. to 105m. per 100 kilos.

OILS, FIXED.—Castor is firmer, first-pressing in barrels offering at 39m. to 39½m. per 100 kilos. Cod-liver is quoted 185m. to 200m. per barrel for non-congealing quality. Linseed is tending firmer, and cotton is dull of sale.

OILS, ESSENTIAL.—Peppermint (HGH) is quoted 15m. to 14½m. per lb., and Japanese dementholsed is quiet. Star-aniseed is also quiet at from 10½m. to 10½m. per kilo.

American Drug-market.

New York, June 21.

The drug-market is quiet and uninteresting, with few transactions of importance. Little improvement is anticipated until after the political campaign.

ALOES.—Curaçao is in light supply, and quotations are firm at 3¾c. to 4c. per lb.

ASAFETIDA.—Prime grades are scarce and firmly held. There is a fair demand for ordinary qualitics, at prices ranging from 19c. to 22c. per lb.

BALSAMS.—Central American copaiba is quiet at 31½c., and Pará is neglected at 35c. Canada Fir is scarce at \$3.50, and Oregon is easier at \$1. Tolu is quiet but firm at 23c. to 25c. per lb.

BUCHU is jobbing in a small way at 16c. for yellowish short, and 18c. for prime green.

CAMPHOR is steady at 61c. in barrels.

CASCARA SAGRADA.—A lot of 4 bags seven-year-old bark damaged by fire sold at 3½c. New crop is offered from the

West at 8c. per lb., f.o.b. New York. For two-year-old bark 11c. is asked, but 10c. will buy; and prime old is quoted up to 16c. per lb.

COD-LIVER OIL.—There is very little demand, and the spot market is weak. Old and new Norwegian are offered at \$46 to \$50. Newfoundland oil is quiet at \$1.50 per gal.

GAMEOGE is in light supply, and for prime pipe 77½c. to 80c. is asked.

JALAP is firm. Recent arrivals have not affected the market, which is steady at 11½c. to 12c. for good-quality root.

MANDRAKE is a trifle firmer, but 7c. to 9c. is still quoted.

MENTHOL is unsettled, and in view of the conflicting advices some holders refuse to quote. The general quotation is \$5 to \$5.25, but \$4.90 will buy in a small way.

OIL OF PEPPERMINT.—Bulk oil has sold up to \$3.40, but \$3.35 will still buy. HGH is firm at \$3.50.

OPUM is fairly steady at \$2.65 per lb. in case lots.

QUININE is quiet and unchanged. Manufacturers continue to quote 24c., while second-hands offer German at 23c. and Java at 22c.

POTASSIUM BROMIDE is quiet at 30c. Exports to Europe still continue in a small way, most of them being balances of contracts made some time ago.

SENEGA is offered at 60c., but excites no interest.

WILD-CHERRY BARK is scarce and firm, at 5½c. to 7c.

ACID, CITRIC is in good demand, at 1s. 0½d. per lb. for English.

ACID, TARTARIC is quoted 11½d. to 11¾d. per lb. for foreign, and English 1s. 0¼d. to 1s. 0½d.

ALOES.—The s.s. *Carisbrook Castle*, from Mossel Bay, has brought 29 cases of Cape aloes.

CALUMPA.—Good quality is scarce and almost unobtainable. Fair pickings are worth from 16s. 6d. to 17s. 6d. per cwt.

CAMPHOR.—It is reported in several quarters that the better tone in refined still continues, although business among refiners is restricted to small quantities only. English in bells is quoted from first-hands at from 2s. 6d. to 2s. 7d.

CANARY-SEED has continued to advance in price, and 77s. 6d. per quarter was paid on Wednesday for Turkish and Larache on the spot.

CHAMOMILES.—A fair amount of demand has been shown for Belgian flowers, which offer at from 35s. to 40s. per cwt., c.i.f., according to quality.

CHILLIES.—Quiet in auction, 24 bags of Java selling at 27s. for good large, 30s. 6d. to 34s. for fair to good small, and 22s. 6d. for dark. Nyassaland (51) and Japanese (65) were bought in.

CINCHONA.—The exports from Java for June amounted to 1,273,000 Amsterdam lbs., against 1,200,000 Amst. lbs. last year and 1,170,000 Amsterdam lbs. in 1902. The total shipments for the first six months now amount to 6,302,000 Amst. lbs., against 5,702,000 Amst. lbs. last year.

CLOVES.—At auction a few bales of Zanzibar were offered, and bought in at 8d., and 12 cases of fine picked Penang were also bought in at 11½d. per lb. Privately the speculative market has been rather quiet, with sales of several hundred bales of Zanzibar for August-October delivery at from 7½d. to 7¾d. per lb., and on Wednesday there were sellers at the lower figure, but no business was reported on that day.

COPPER SULPHATE.—Absence of demand has led to a further reduction in the price of ordinary brands, which are now offered at 19c. per ton, and for Liverpool make 19c. 5s. to 19c. 10s. per ton is quoted.

CORIANDER is firmer, at 15s. per cwt. for Morocco on the spot, as stocks are decreasing.

GINGER.—At auction ginger was flat, and of 857 barrels Jamaica offered, only about 100 sold publicly, although a moderate quantity was afterwards disposed of privately. Fair bright to good washed sold at from 44s. 6d. to 46s., middling to good middling 40s. 6d. to 43s. 6d., ordinary bold dull 34s., and dark, part lean, 31s. to 32s. per cwt. Cochin and Calicut was bought in, and privately 'fair washed rough Cochin has been sold at 19s. In Liverpool some 400 bags Sierra Leone on the quay have been sold at 19s. per cwt., in transit.

GUM ARABIC.—The market is practically cleared of so-called insoluble Persian gum, and the first arrivals of the

new crop are expected to meet with a good demand. At auction 253 packages were offered, and a few lots sold, including scented Aden at 20s. and rather reddish Soudan sorts at 23s. 6d.

HENEANE-LEAVES.—New crop is offered at from 28s. to 36s. per cwt., c.i.f., according to quality.

IPÉCACUANHA.—Since the auctions the remainder of the Johore ipécacuanha offered thereat has been sold at the prices paid in the sale—viz., 4s. 6d. per lb. Cartagena is still held at 4s. 6d. on the spot.

LIME-JUICE.—Choice pale raw West Indian is worth 1s. 6d. per gal.

LIQUORICE-ROOT.—Prices for cut decorticated South European remain dear owing to scarcity, and one agent asks from 35s. to 45s. per cwt., c.i.f., according to quality.

MACE was 1d. per lb. cheaper in auction, 52 packages of West Indian selling at from 1s. 7d. to 1s. 8d. for good pale, 1s. 5d. to 1s. 6d. for good pale and reddish, 1s. 3d. to 1s. 4d. for fair red, and 1s. 1d. to 1s. 2d. for broken.

MENTHOL.—Some retail sales of Kobyashi crystals have been made at 14s. per lb. on the spot, and for arrival business has been done at 12s. 9d. per lb., c.i.f., for August-September shipment, the latter being "bear" sales.

MYRRH is unaltered, with small sales of "sorts" at 92s. 6d. per cwt.

NUTMEGS.—West Indian were easier in auction, and of 227 packages offered the bulk sold.

OIL, ALMOND.—The makers have reduced the price by 1d. per lb., and now quote B.P. quality at 1s. 2d. and pallid at 1s. 4d. per lb.

OIL, CASTOR.—The market is steadier, at 19s. 7s. 6d. per ton for first-pressing of Hull make, and 17s. 7s. 6d. for second-pressing, for prompt or July delivery, ex wharf London.

OIL, COD-LIVER.—The Finmarken fishing may now be considered closed, and with the final report of the output our weekly telegram will be discontinued for the season. A fair amount of interest has been shown in the Bergen cod-liver oil market, and finest non-congealing oil is firm at 15s. per barrel, f.o.b. Bergen. The exports from that port to date amount to 3,487 barrels, against 1,227 barrels at the corresponding period of last year.

OILS, ESSENTIAL.—English *Clove* oil is the turn lower, with sellers at from 4s. 6d. to 4s. 9d. per lb., according to quantity. There is a good demand for *Sandalwood* oil, and a genuine pure English-drawn oil is obtainable at 10s. 9d. per lb. White essential *Camphor* oil is steady at the old figures of 45s. to 46s. per cwt., but there is not much demand at the moment. Small sales of *Star-Aniseed* oil have been made at 4s. 9d. per lb., but probably this price would be shaded for a string. *Cassia* oil is quite inactive. Messina essences, such as *Lemon* and *Bergamot*, remain firm, a good brand of the former being quoted at 2s. 3d. to 2s. 5d. per lb. American H.G.H. *Peppermint* oil is steady, with small sales on the spot at 14s. 6d. per lb., and of tin oil spot supplies are small. Business has been done at 13s. 4d., but 13s. 6d. is a more general quotation; and for D & O brand 14s. is quoted, and 15s. for *Todd's*. Japanese dementholisised, Kobayashi brand, has been sold at 5s. 6d., spot, and 5s. 9d. is now asked. For August-September delivery, 4s. 6d. to 4s. 7d., c.i.f., has been paid for dementholisised oil, and the higher price was asked on Wednesday. These are, of course, "bear" sales.

OILS, FIXED.—Linseed is quoted at 17s. in barrels, and *Rape* is unaltered at 22s. per cwt. for refined. Refined *cottonseed* is firmer, at from 18s. 3d. to 20s. per cwt. Lagos *Palm* is 26s. 6d. *Petroleum* is easier at 6s. per gal. for American water-white, and 5d. for Russian. *Turpentine* has been quiet, at 41s. 3d. to 41s. 4d. per cwt. for American on the spot. *Cochin Cocanlut* is worth 31s., and Ceylon 28s. per cwt., on the spot.

OLIBANUM.—At auction 650 cases were mostly bought in, including ordinary to pale drop at 37s. 6d. to 50s., and fine garblings at 30s. to 35s.; 19 cases ordinary sold, without reserve, at from 25s. to 26s.

OPIUM.—The London market remains very quiet, with

retail sales of secondary soft shipping at rather easier prices. Persian is steady, with a little inquiry.

SMYRNA.—The market is firmer this week, and we have to report an advance of fully 1d. per lb. over last week's quotation. The sales amount to 84 cases, mostly Yerli and Karahissar tale quale. The following are the quotations: New current 6s. 1d. to 6s. 3d. per lb.; old usual run, manufacturing 6s. 4d. to 6s. 6d., as to quality 6s. 6d. to 6s. 11d., Yerli as to quality 6s. 7d. to 7s. 7d., Bogaditz 6s. 10d. to 7s. 7d., and Karahissar 6s. 7d. to 7s. 1d. per lb. f.o.b. The arrivals to date amount to 145 cases, against 79 cases at the same time last year.

Another correspondent writing on the same date states that during the past fortnight the easy attitude of holders has facilitated a good business, comprising about 300 cases of old and new tale quale of various qualities, at from the parity of 6s. 4d. to 7s. 3d. per lb. Some 40 cases of the above were new-crop *Adette* and *Karahissar* of the new crop, for August delivery, which sold at from 6s. 4d. to 6s. 7d. per lb. The harvest is being gathered under exceptionally favourable conditions, and a crop of 12,000 cases is practically assured.

PEPPER.—At auction the small offerings were mostly bought in. Good to fine Ceylon (27) sold at 5d. to 6s. per lb. Good to fine heavy bold *Mangalore* (9) sold at from 9s. 3d. to 10s. Privately Singapore on the spot is held for 5s. 3d., and for August-October shipment moderate sales have been made at 5s. 6d. to 5s. 9d. per lb. *White pepper* in auction (46) was bought in at 9s. 3d. for good bold Singapore. The business done privately includes 40 tons Singapore for August-October delivery at 7s. 6d. per lb. landed, and 7s. 6d. c.i.f., and July-September shipment at 7s. 6d., c.i.f., delivered weights, being dearer. Penang is offered at 7d., c.i.f.

PILOCARPINE.—The cheap offers which have been in the market for some time appear to have been withdrawn, and the market is firmer, at 30s. per oz., with probably a little obtainable at 28s. 6d.

PIMENTO.—Quiet in auction, and of 260 bags offered, about 30 sold at 3d. per lb. for fair.

PODOPHYLLUM-ROOT.—Several spot sales have been made at 45s. per cwt.

POTASHES.—Supplies have been more plentiful of late, and prices are rather easier. In Liverpool, firsts Americans are worth 33s., Canadians 34s., and Montreal 35s., and London prices are worth about 1s. more.

QUININE.—As a result of the 7 per cent. decline in the unit at Amsterdam last week, the makers of quinine reduced their official price by 1d. per oz., and now quote 1s. for the German sulphate in bulk. Whiffen's price has also been reduced 1d. to 1s. in bulk, and Howards' price for the sulphate remain unchanged at 1s. 1d. in bulk and 1s. 3d. in vials of not less than 1,000 oz. Their prices for salts have, however, been reduced in conjunction with other makers. In the second-hand market the tone continues very flat, and very little business is reported, there being spot sellers of good German brands of sulphate in bulk at 10s. 4d. per oz. (or 1d. less than the closing prices of last week), and buyers at 10s. 6d.

The Amsterdam Quinine Works have lowered their prices by 1fl. per kilo., so that their quotations are now 21s. 1fl. for Ed. II. and 23s. 1fl. for Ed. III.

ROSE-PETALS.—New French are in fair demand, now offering on the basis of 400f. per 100 kilos.

SAFFRON.—Owing to the absence of demand prices in Valencia have been fluctuating, and are about 1s. per lb. lower. Good to fine B.P. quality is quoted in London at from 30s. to 31s. per lb.

SARSAPARILLA.—From second hands a fair demand is reported. Grey *Jamaica* is quoted 1s. to 1s. 2d., good *Lima* at 11d. to 1s., and a good brand of *Honduras* at 1s. 3d. per lb.

SENEGA continues steady, and several holders report retail sales at 2s. 6d. per lb. net on the spot.

SELLAC.—There has been a fairly steady tone in the delivery-market, and a moderate amount of business has been done, including July at 20s. to 20s., August delivery at 20s. to 23s., September 19s., October 19s. to 19s., November 19s. 6d. to 19s., and December delivery 19s. to 19s. per cwt. On Wednesday prices were rather easier, and on the spot TN has been sold

during the week at prices varying from 207s. to 215s. for fair to good genuine, and ordinary resinous at 202s.

WAX. BEES'.—The exports of beeswax from the colony of the Gambia during 1903 amounted to 38,640 lbs., valued at 1,589s., against 43,544 lbs., valued at 1,843s. in 1902.

Fire at Gun Wharf.

What proved to be a serious fire broke out at the warehouse of Litchfield and Soundy, Gun Wharf, on Wednesday night, June 29, and considerable damage was done to the contents, including stocks of gum arabic, olibanum, ginger, and shellac. Full particulars of the damage done were not available to-day, as the fire was only got under at 2.30 on Thursday morning. Market prices of the articles are not likely to be affected thereby, but a fire of this character causes great inconvenience to owners, as according to the insurance policies they only obtain current market values for their goods, and as values of this kind of produce have fallen lately, such insurance is unsatisfactory. The consequence is that merchants talk of transferring their insurance on such goods to a concern which holds out better inducements.

Java Quinine-tender.

At the tender of Java quinine held at Batavia on June 29, 5,411 kilos. were offered, of which 119 kilos. were sold at an average of 16 $\frac{1}{2}$ fl. per kilo. (about equal to an average unit of 6s. Amsterdam), against 17 $\frac{1}{2}$ fl. per kilo. paid at the previous auction, on May 25. The next tender will take place on August 3.

Spanish Arsenic.

A company has been formed to develop deposits of arsenical pyrites situated in the province of Orense, Spain. The ore carries some gold and from 25 to 40 per cent. arsenious acid. It is proposed to treat the pyrites by cyanidation for the recovery of the gold, and the residue will then be used for the production of arsenic. A number of concessions have been granted recently in the same locality for similar undertakings.

Malaga Exports.

Among the exports from Malaga during the past three years were the following:—

	1901.	1902.	1903.
	Tons.	Tons.	Tons.
Olive oil	13,398	10,320	16,730
Almonds	1,128	1,925	1,927
Canary-seed	65	33	15
Aniseed	37	48	41
Cumin-seed	39	11	24
Pepper, ground	55	31	33
Liquorice-root	12	6	4

An increase of 6,000 tons is shown in the amount of olive oil exported. This is attributed to the high rates of exchange in favour of the shipper rather than to any excessive buying demand. There has been a great increase in planting olive-trees throughout the province.

Spike-disease in Sandalwood.

Up to the present time no effectual remedy appears to have been found to combat the spike-disease which affects the sandalwood area in India, although the matter has and is closely engaging the attention of the Government experts. Meanwhile, the disease has not so far affected the price of sandalwood or the oil. The latest contribution to spike in sandal is contained in the April number of the "Indian Forester," where Mr. P. V. Sonoroy, ranger, writes some notes anent the remark, made by Mr. P. M. Lushington, that it may not be impossible to trace the origin of spike-disease in sandal-trees to fire. Mr. Sonoroy writes with reference to the western half of the Hunsur Taluk of the Mysore State, and in this locality he says that there is no spike in the areas burnt over, and sandal seedlings and root-suckers look all the better for being burnt. In affected areas, he says, sandal is not the only tree spiked, as his attention has been called to the disease in *Zizyphus*, which is characterised as the forerunner of spike in sandal. Mr. Sonoroy concludes his notes with the remarks that "some foresters favouring spike uprootals appear disappointed with the reappearance of the disease in areas where uprootals were once made, and have come to doubt the efficacy of such operations. I believe there cannot be a greater mistake. Considering the long distances lateral roots of sandal travel in search of food-materials, I doubt if the uprootals made have been perfect. In any case, unless the affected areas are thoroughly fire-protected and unless all spiked sandal are then and there uprooted on the lines suggested by Dr. Butler, there seems no hope, in the near future at least, for the eradication of the disease."

Reviews.

The Phase Rule and its Applications. By ALEX. FINDLAY, M.A., Ph.D., D.Sc. 7 $\frac{1}{2}$ x 5. Pp. lxiv + 314. 5s. (Longmans, Green & Co.)

WE warmly welcome the appearance of the series of "Text-Books of Physical Chemistry," edited by Sir William Ramsay, K.C.B., &c., of which the book before us forms the first volume. Prefixed to this volume there is an "Introduction to the Study of Physical Chemistry," by the Editor, which extends to 48 pages, and is a readable introduction, of a general and historical description, to the books of the series. It cannot be said that the phase rule is an easy, or a specially attractive subject, but in his treatment of this rule and its applications Dr. Findlay has taken care to meet, as fully as possible, the difficulties of junior students, by simplicity of statement and abundance of illustration. At the same time, the very numerous references to original memoirs cannot fail to be of the greatest service to those of his readers who desire to make a further study of any of the particular branches with which he deals. We may mention that the treatment of the subject-matter is entirely non-mathematical. It is undoubtedly along the lines of the newer views in physical chemistry that the teaching of elementary chemistry will, ere long, quite generally proceed, and therefore it behoves teachers who wish to keep themselves abreast of the times, as well as students, to familiarise themselves with these views. We do not know of any text-books more likely than those of this series to take a prominent place in assisting teacher and student alike to obtain a grasp of chemistry from its physical aspect. The other books of the series (which is to consist of seven volumes in all) are expected to appear in rapid succession.

An Anatomical Atlas of Vegetable Powders. By HENRY GEORGE GREENISH and EUGENE COLLIN. 9 $\frac{1}{2}$ x 7 in. Pp. 16 + 287. 12s. 6d. net. London, 1904: J & A. Churchill.

PHARMACOGNOSY is not a popular subject when it goes beyond a certain point; certainly when it enters the region which Messrs. Greenish and Collin have so well explored in their anatomical atlas it is to the majority a trackless wilderness. The object of the volume under review is to indicate the landmarks, so to speak, by which the territory may be crossed. The authors confine their attention to microscopic appearances of starches, flours, leaves, flowers and flowering tops, seeds and fruits, woods, barks, rhizomes and roots, corms and bulbs, fungi spores and glands, and galls—all as they occur in powder, the object being to assist in using the microscope to determine the purity, or otherwise, of commercial powdered drugs, and certain foods which are on the border-line between alimentation and medication. The work contains 138 pen-drawings (chiefly by the French author) reproduced in facsimile and appropriately grouped. The elements of each drawing are adequately described on the page opposite the reproduction, and each section is prefaced by a good account of the general characteristics of the part dealt with. The "matter" composing the book was originally contributed serially to a journal (in fact, the same type is used), and the book lacks the consistence and solidity of a treatise. We mean that it is not exhaustive; e.g., the powder of Ledger cinchona bark is illustrated, but not that of any other cinchona. This circumstance is almost typical of the histologist's weakness: he is apt to disregard the wants of every-day life. People who buy Ledger cinchona care not a fig for its microscopic appearance: what they want from it is alkaloid. On the other hand, those who desire to examine cinchona powder microscopically and consult Greenish and Collin naturally expect to find something about red cinchona or any other that is official for administration *per se*. They will, therefore, be nonplussed to find that the diagnostic characters of powdered cinchona-bark are referred to a kind which is solely used by alkaloid-manufacturers. We are not at all disposed to depreciate a book because it lacks some things—indeed, we value this anatomical atlas for what there is in it, but we would suggest to the authors the desirability of introducing more comparative anatomy; for instance, Cartagena ipecacuanha along with the Rio, and scopolaproot with belladonna.

Consular Counsel.

CALIFORNIA.

IN connection with the lemon-industry in California we learn from the British Consul at San Francisco that growers are anxious to obtain a machine for preparing the oil, the present process being unsatisfactory. The citrus-fruit industry in California has shown great development, and during the season 1902-3, which closed on October 31, the exports of oranges and lemons amounted to 8,600,000 boxes. The olive-industry in San Diego County has also shown an increased development by the establishment of new pickling-factories and olive-oil mills. Only brief reference is made to the Californian honey-crop, the Consul stating that about 75 truckloads were sent out of San Diego County. The amount was not so large as in some previous years, but good prices were obtained for it. San Francisco exported 10,676 flasks of quicksilver during 1903, valued at 95,949/., against 8,884 flasks, valued at 76,287/., in the previous year.

OPORTO.

Referring to the receipt of cards and leaflets at his Consulate from British traders, the British Consul at Oporto gives the following illustration of the uselessness of the system :

Some time ago a card was sent here with a short description of a certain class of goods connected with the druggist-trade, followed by the words "we would esteem it a favour if you would put our name on your list of reference." Now, there are about thirty wholesale importing druggists in this town; they are constantly (perhaps in their own opinion too constantly) being visited by agents and travellers—so much so that one of them has an elaborate notice in his shop stating an hour at which agents, and another at which travellers, are received. In view of these persistent solicitations for orders by persons primed with every particular of the goods, they have to offer for sale, is it likely that this importer is going to leave his place of business and come to the various Consulates to ask if he can be told of such a thing as, say, a firm willing to sell paints? Except in the case of firms who already have a well-established connection, almost the only manner in which business can be obtained is by means of an agent or traveller, or, preferably, both. The importation of chemicals into Oporto is increasing, owing to the development of native industries, and in most lines the United Kingdom secures a good share of the trade.

BORDEAUX.

The British Consul at Bordeaux, writing in regard to the cultivation of olives, states that a quarter of a century ago there was some 375,592 acres of French soil devoted to this product, whereas the present estimated area is only 308,875 acres, which is being gradually confined to the shores of the Mediterranean. Modern facilities of transport tend to throw production more and more into those regions where climatic risks are least and nature provides the most abundant and cheapest crops, whilst the extensive use of oleaginous seeds and nuts is also supplementing and superseding the use of olives to an extent which has an appreciable effect upon the demand for pure olive oil. Many landowners throughout France have substituted vines for olive-trees on suitable soils, leaving the latter on properties where the conditions are less propitious. Bordeaux is an important centre for the export of chemicals, and among them we notice the following :

	1902	1903
	Cwt.	Cwt.
Cream of tartar	43,649	42,883
Crude tartar	31,350	32,974
Wine-lees	20,045	4,739
Glycerin	5,919	7,360
Verdigris	3,044	2,838
Coal-tar products	2,687	942

THE PERSIAN GULF.

The new Persian Customs tariff by which import-duties were in the main increased and export-duties reduced, has created many difficulties among the merchants, owing to the bulk of the imports having to pay duty by weight. Apart from this, says the British Consul at Bushire, it does not appear to have in any way affected the trade of the Gulf. The duty on indigo, according to the new tariff,

works out at about 31 per cent., instead of the 5 per cent *ad valorem* which used to be paid in former year. Notwithstanding this, the imports of indigo into Bushire show a large increase over the previous year—viz., 1,850 cwt., which all came from India. This substantial increase shows that the duty under the new tariff is not likely to affect its importation injuriously, and this is so because of the strict prohibition enforced against the importation of aniline dyes. Of Persian opium 4,859 cwt. was exported from Bushire, against 4,115 cwt. during 1902. This was chiefly exported to the United Kingdom and China, and Belgium also took a certain quantity. Rose-water to the extent of 20,509 packages, being an increase of 6,621 packages, was shipped principally to India, Turkey, and Zanzibar. Among the imports into Bushire, we notice 29 cases of quinine—an increase of 19 cases over that of the previous year—in addition to which 267 cases, or 154 cases more than 1902, were shipped to Lingau. From Mohammerah, 8,893 cwt. of Persian so-called insoluble gum was exported, or an increase of 4,386 cwt. over that of 1902.

Produce Notes.

BOLIVIAN COCA-PRODUCTION.

THE latest details concerning the production of coca-leaves in Bolivia is to be found in a recently published report written by the Consul-General for Belgium, an extract from which appears in the "Board of Trade Journal" for April 23. Bolivian coca is mainly cultivated in the provinces of North and South Yungas, and on a much more limited scale in the province of Caupolicán. The province of North Yungas produces about 34,000 tons of coca annually, the greater part being consumed in Bolivia. According to official figures, the quantity of coca exported from Bolivia during 1901 was 250 tons. Coroico, Copiata, and Chulumani form the centre of the coca-culture in Bolivia. The plantations extend from the summit to the base of the mountains. Coroico is situated 6,500 feet above sea-level, and is the highest point in the country where coca is cultivated. All the harvest, with the exception of the portion retained for local consumption, is conveyed to La Paz by mules, at a cost of from 4s. to 5s. per quintal. Labour is scarce, the whole population of the two provinces being 27,000. In spite of the difficulties of transport and labour, the cultivation of coca has proved lucrative. The labour-problem is most difficult to solve: for white colonists to establish themselves in the country it would be necessary to constitute a plantation worked entirely by whites, as these latter would never work with Indians. The great need of these provinces, says the Consul, is good means of communication, and a railway would increase enormously the wealth of the country. At the present time half the population is employed in transport; and as a railway would release the major portion of these, they would be employed on plantations, and the production would probably soon be doubled. It is interesting to note that there are still many cinchona-plantations, which might be exploited, but their proprietors neglect them entirely, owing to the fact that the cost of transport to the coast is greater than the present market value.

NORTHERN NIGERIA.

From the report on a series of mineral and vegetable products from Northern Nigeria by Professor W. R. Dunstan, recently printed, it appears that several interesting crude drugs from this district have been examined at the Imperial Institute. Some specimens of gum from Bassa Province gave good analytical results as compared with gum arabic, but the mucilage lacked adhesiveness. A better sample from Borgu Province is reported as being similar to Mogador gum arabic, and completely soluble in water. From the Kontagora Province a sample of the fruit of *Iringia Barteri*, Hooker, known as "dika," was submitted to the Institute, with the note that it is used by Hausas to prevent sickness. The amount of fruit received was too small for extended investigation, but it is suggested as a possible food for cattle. Some tamarinds arrived "mouldy and unsuitable for valuation," but the promise is made that if a sample preserved in

syrup is sent, the commercial value of the drug could be ascertained. Ben oil seeds have been sent from Northern Nigeria, and, if obtainable in quantity, and the oil could be prepared at reasonable price, would be an asset worth developing. A horn of "snake-bite poison cure" contained a black, somewhat granular extract of vegetable origin, but a 14-lb. sample of the plant from which it is prepared is needed for examination. Several specimens of minerals submitted are disappointing: some thought to contain potash were found to be mainly sodium carbonate, and another, described as "antimony," was shown to be shale containing graphite. The rubber and gutta-percha samples were likewise far from encouraging.

Strychnine-mixtures.

By GEORGE ROE.

A FEW months ago I had a conversation with the author of "The Art of Dispensing" in regard to the limits of precipitation of strychnine by alkaline carbonates and certain other alkaloidal precipitants, and he suggested a series of typical mixtures with the view to observation of results on keeping the mixtures at the ordinary temperature. The solubility of strychnine in distilled water at 60° F. is not more than 1 in 6,000, but it was found that a mixture containing 20 gr. of ammonium carbonate and 20 minims of solution of strychnine hydrochloride, with distilled water to 1 oz., remained clear on standing, although the proportion of strychnine is 1 in 2,200. I have kept this mixture for several months, and it still remains free from crystallisation. But this does not apply to the same strength of strychnine mixture with all other alkalies, and I accordingly append notes on a dozen prescriptions:

With Ammonium Carbonate.

	A	B
Ammon. carbonat.	...	gr. xx.
Liq. strychninae	...	m _{xx} .
Aq. destillat. ad	...	5j.

A remains clear, B gradually deposits fine crystals of strychnine which partly adhere to the bottle.

With Solution of Ammonia.

Liq. ammonie	...	...	m _{xx} .
Liq. strychninae	...	...	m _{xx} .
Aq. destillat. ad	...	...	5j.

Rather dense crystals of strychnine separate, a few adhering to the walls of the bottle.

With Aromatic Spirit of Ammonia.

Spt. ammon. arom.	...	...	m _{xx} .
Liq. strychninae	...	...	m _{xx} .
Aq. destillat. ad	...	...	5j.

Flocculent crystals of strychnine are thrown out.

With Bicarbonates.

	C	D
Potassii bicarbonat.	...	gr. xx.
Liq. strychninae	...	m _{xx} .
Aq. destillat. ad	...	5j.

C remains perfectly free from deposit of strychnine, and it is not until the alkaloid is increased to the proportion of 1 in 880 (as in D) that we get a fine crystallisation of strychnine which adheres to the bottle.

Sodium bicarbonate was used in place of potassium bicarbonate, and in the same proportions as in C and D, with substantially the same results, the 20-gr. one being free from crystallisation, and the 50-gr. one yielded granular, transparent, and comparatively large crystals of the alkaloid.

With Potash.

Twenty grains of potassium carbonate with 20 minims of strychnine solution and distilled water to 1 oz. yielded a crystalline deposit of the alkaloid. The crystals were in tufts. Using liquor potassæ m_{xx}, in place of the carbonate, the crystallisation is finer and apparently more abundant.

Nux Vomica and Alkalies.

Tincture of nux vomica was also experimented with, and in the case of each of the following there is a distinct crystalline separation of alkaloids:

	E	F
Tr. nucis vom.	...	5j.
Spt. ammon. arom.	...	m _{xx} .
Aq. dest. ad	...	5j.

With Potassium Iodide.

Liq. strychninae	...	...	m _{xx} .
Potassii iodidi	...	...	gr. xx.
Aq. dest. ad	...	...	5j.

This gave a deposit of strychnine.

Although in general dispensing practice deposits of strychnine in mixtures containing a bicarbonate are not usually observed, one must recognise the fact that if the quantity of the liquor exceeds 10 minims in a tablespoonful we begin to approach the dangerous limit in temperate climates. The fact should not be overlooked that solution of potassium bicarbonate slowly gives off carbonic-acid gas, especially when the temperature exceeds 80° F., therefore the bicarbonate is partly resolved into carbonate, which precipitates the alkaloid with certainty.

Other cases of strychnine-precipitation take place, such as with iodides and bromides, and are well known. The above examples are satisfactory because they decide to a certain extent how far it is possible to answer questions whether solution of strychnine and its preparations can be dispensed with the bicarbonates and sal volatile. There is in all cases a danger-point; but it can be said with certainty that the strength of the mixtures would have to be such as rarely occurs in prescriptions.

From a theoretical point of view such combinations do not appear correct, and it cannot be surprising that those inexperienced in prescribing and dispensing should be doubtful as to what might happen. Tincture of nux vomica and solution of strychnine are so often prescribed with sodium and potassium bicarbonates, also ammonium carbonate and sal volatile, with such beneficial effects that it would be difficult to persuade the prescriber he is guilty of writing an inelegant prescription when looked at from a theoretical point of view.

The Term "Extractum Belladonnae."

IN the course of an article on this subject "The Hospital" says: The pharmacist who finds this phrase in a prescription turns in vain to the pages of the Pharmacopœia for a precise and confident interpretation. Considering how frequently the term is used in prescriptions and how for many years it was applied with pharmacopœial sanction to a definite preparation, namely the "green" extract, this seems a very absurd position. And it could have been entirely avoided by placing the term "ext. belladonnae" as a synonym for the preparation now known officially as "ext. belladonnae viride." The two names in successive Pharmacopœias refer essentially to one and the same thing, and it would have avoided all possibility of ambiguity and confusion had the older term been carried forward as a synonym into the new volume. Unfortunately there are certain authorities concerned in the construction of the Pharmacopœia who forget that this exists not for the display of a pedantic passion for a severely accurate and symmetrical nomenclature, but for the public interest and safety. It is this influence, we doubt not, that is responsible for the fact that in the volume sanctioned by Parliament for the authoritative interpretation of the terms used in physicians' prescriptions the phrase "ext. belladonnae" has neither part nor lot. Nevertheless, the duty of the pharmacist seems to us free from doubt. "Ext. belladonnae," it is true, is a term for which the existing Pharmacopœia offers no explanation, and it is therefore open to the pharmacist to request the prescriber to define the preparation he desires. But in view of all the circumstances this may be held to

be quite unnecessary. Until 1898 the term had an official existence and was the official name of the "green" extract. The "green" extract still exists, though it is now officially qualified as "viride." It cannot be doubted that prescribers in the present year of grace mean by "ext. belladonnae" the preparation so named until the issue of the Pharmacopœia of 1898. This is the "green" extract. And pharmacists may safely adhere to the principle that when the physician uses a term which is not in the existing Pharmacopœia but was recognised and defined in the immediately preceding Pharmacopœia, he means the preparation thus recognised and defined. Every one of the official (1898) extracts of belladonna has now a specific qualification—"alcoholic," "liquid," or "green"—and therefore when "extract" is written without qualification there is on the present-day facts room for uncertainty. But when all the circumstances are duly considered the pharmacist may, we feel sure, rely on the interpretation we have ventured to suggest. If his conscience is perturbed he has the option of consulting the prescriber. And for any uncertainty which prescriber or dispenser may suffer, thanks are to be rendered to the strict disciplinarians who have played the schoolmaster in the pages of the British Pharmacopœia.

American Notes.

(From an Occasional Correspondent.)

A NEW SIDE-LINE.—The druggists of St. Louis have discovered a new "side-line." Approached by an evening paper, they have all agreed to act as reporters and send prompt accounts in by telephone of any interesting happening that may come to their attention. It is said that some of them have acquired the reporting art very quickly, and have derived a considerable revenue therefrom.

BARRED.—"Peruna" is probably the best selling patent medicine in the United States. The fiat has gone forth from labour circles, however, that "Peruna" must not be purchased hereafter by members of labour organisations, and the result on the sale of the product remains to be seen. The manufacturers of "Peruna" have been mixed up with some of the newspapers who have had trouble with the unions, and in supporting the newspapers against the unions have brought down upon their heads the wrath of the latter. It is an interesting situation, to say the least.

KICKING.—The troubles Messrs. Hance Brothers & White have had recently with the National Association of Retail Druggists have been chronicled in these columns. Now another large house of manufacturing pharmacists is in hot water. Messrs. H. K. Wampole & Co. have been acting very naughtily in selling goods to aggressive cutters, and the N.A.R.D. is busily engaged in making things warm for the Philadelphia manufacturers. We shall see what we shall see. Meanwhile Messrs. H. K. W. & Co. are not getting quite the support from retailers that they used to have.

THE CALIFORNIA BOARD OF PHARMACY is now on the rack! Charges are made that members of the Board have been unfair in the conduct of examinations, that they have discriminated against the graduates of a certain college, and that they have used political influence for personal ends. It is stated that some of the candidates at a recent examination were supplied with the questions beforehand! A thorough investigation has been ordered by the Governor. It should be stated that a similar case has not arisen for many years, and that the present condition is therefore not one of frequent occurrence.

A DEARTH OF ASSISTANTS.—During the past year or two in America there has been a considerable stringency in the drug-clerk market. Good clerks have been exceedingly hard to find, and it has been increasingly evident that young men were passing pharmacy and entering occupations where the hours of labour are shorter and the pay somewhat "longer." One effect of this situation has been an increase in salaries. Wages are probably 20 per cent. higher than they were two years ago. In the first-class

cities, like New York, Philadelphia, and Boston, the average pay ranges between \$20 and \$22 a week; in the second-class cities, like Buffalo, Detroit, and St. Louis, the average salaries have risen from about \$12 to \$15 or \$16. Of course managers get more than this, as do also the better class of clerks.

THE MICHIGAN DRUG-CLERKS' ASSOCIATION, with headquarters in Detroit, is endeavouring to keep salaries up to what it considers an equitable standard. It has established a minimum of \$15 for fully registered men, and \$12 for what in America are called "assistants"—that is, men who have not received the qualification which permits them to conduct a store for themselves, or for others when the proprietors are absent. The Association has issued a card containing the names of perhaps half the druggists in Detroit, and it is understood that these men are known as "fair" employers—to use a trade-union phrase. "Fair" employers engage only those clerks who are members of the Association, and pay at least the minimum salaries. The Association requests all of its members to refrain from accepting positions with "unfair" pharmacists.

PROPRIETARY FORMULAS.—A Bill is before the Ohio Legislature which, if passed, will compel proprietary-remedy manufacturers to publish their formulas on all bottles and packages offered for sale in that State. Commenting on this the "Mansfield News" points out that although the Bill provides that the formulas shall be pasted on all bottles and packages, it does not provide in what language the formulas shall be printed or how much of the dead languages may be used in conforming with the law. If this Bill or any other Bill of the sort becomes a law (continues the "News") there is nothing in the statutes or law of Ohio to prevent newspapers from publishing the name of the attending physician with every obituary notice. That course has been agreed upon by the three leading newspaper associations of Ohio, aggregating over two thousand newspapers in Ohio!

THE PROPRIETARY ASSOCIATION OF AMERICA held its semi-annual meeting in Chicago two or three weeks ago, and the National Association of Retail Druggists is not wholly satisfied with the outcome. The retailers want the proprietors to adopt the serial-numbering and direct-contract plan of marketing their goods, but the proprietors baulk at this prospect. They are perfectly satisfied with the old tripartite plan, and in order to keep the retailers in good humour they entered the lists several months ago in an effort to make this plan really and truly effective. Under the name of the "Washington Promise" committee they have done some good work, but the retailers are still not satisfied. Two great leaks have manifested themselves: the large city mail order houses who advertise patent medicines at cut rates to their patrons in the country districts, and the wholesale grocers, who have no difficulty in buying goods under the tripartite plan.

THE U.S.P.—An article on "The Forthcoming Pharmacopœia," contributed by Professor Remington, Chairman of the U.S.P. Committee of Revision, to the "American Journal of Pharmacy," has attracted considerable attention. Professor Remington states that the book will probably be ready for distribution by October or November, and that the retail price will be \$2.50. Unlike previous editions, the new revision will contain doses—average doses, not minimum and maximum statements. The number of drugs submitted to chemical assay will be greatly extended. The use of synonyms has been discouraged in view of the fact that these are sometimes loosely applied, and often lead to legal entanglements. Professor Remington intimates that the recent hue and cry for alternative quantities in the common systems of weights and measures will be unheeded on the ground that the Committee of Revision has no authority in the premises. The metric system will be used solely.

A NEW YORK DRUGGIST displayed a sign bearing the following poem in one of his windows in behalf of a toilet-soap he was pushing:—

Come in, girls,
And reddens your roses,
Come in boys
And whitens your noses.

Svatula.

South African News.

(From our own Correspondents.)

Note.—THE CHEMIST AND DRUGGIST is regularly supplied by order to all the members of all the Pharmaceutical Societies in British South Africa, viz.:

SOUTH AFRICAN PHARMACEUTICAL ASSOCIATION.

PHARMACEUTICAL SOCIETY OF CAPE COLONY.

NATAL PHARMACEUTICAL SOCIETY.

TRANSVAAL PHARMACEUTICAL SOCIETY.

RHODESIA PHARMACEUTICAL SOCIETY.

NORTHERN DISTRICT CHEMISTS' ASSOCIATION.

PHARMACEUTICAL SOCIETY OF ORANGE RIVER COLONY.

Cape Colony.

CONSEQUENT upon a resolution passed at the Medical Congress in Cape Town last January, a public meeting was held in Cape Town on June 3, under the presidency of the Governor, Sir Walter Hely-Hutchinson, at which it was resolved to form "an association for the prevention of consumption and other forms of tuberculosis" in Cape Colony. Sir Walter Hely-Hutchinson consented to become patron of the association, and the first President is Dr. L. S. Jameson, Prime Minister of the Colony.

THE condition of life on Robben Island, the leper colony, has been the subject of a Parliamentary investigation. The report which has been issued as a result recommends that the policy of segregation in respect to the lepers shall be adhered to, and that the main asylum shall remain as heretofore on Robben Island. The question of effecting radical improvements in the conditions of living on the island requires, however, serious and immediate attention. There has apparently been disgraceful overcrowding, and next to nothing has been done to provide the patients with amusements or recreation.

ON June 7 a case which has excited great interest in the Colony was decided at the Cape Town Criminal Sessions. It was known as "the vitriol-throwing case," the victim being Mr. Piet Marais, a well-known and wealthy colonial, and the accused his daughter-in-law, Mrs. Bellfield Marais, and her fifteen-year-old daughter. Mrs. Marais apparently accused Mr. Piet Marais of causing an estrangement between his son, Bellfield Marais, and his wife and daughter. She is alleged to have coerced the younger prisoner, who threw sulphuric acid in the face of Mr. Piet Marais, almost blinding him. The vitriol was purchased from Mr. William Turnbull, chemist, manager of Messrs. P. J. Petersen & Co.'s branch pharmacy in Adderley Road, Cape Town. Mrs. Marais telling Mr. Turnbull that it was to be used for cleaning-purposes. She was supplied with 3 oz. of a mixture of 78 per cent. of sulphuric acid and 21.9 per cent. of water, in a hexagonal poison-bottle labelled "Oil of vitriol—poison." After hearing evidence at great length, the jury found both prisoners guilty, with a strong recommendation to mercy in favour of the younger prisoner. Sir John Buchanan sentenced Mrs. Marais to eighteen months' imprisonment, and the child to be detained in the house of correction until 100% security is found for her appearance for sentence if called upon within twelve months.

Natal.

DRUGS AND CHEMICALS valued at 38.000% were imported into Natal during the first quarter of 1904, compared with 45.000% for the corresponding period of 1903.

Orange River Colony.

THE "Bloemfontein Pelican" of May 20 contains a very good portrait of Dr. Kellner, the *doyen* of the medical profession in Bloemfontein. Dr. Kellner was born at Charlottenburg, near Berlin, in 1836, and after taking the degrees of M.B. and M.D. at the Berlin University, served one year as military doctor to the 2nd Garde Uhlan Regiment, and then went to South Africa, arriving in Bloemfontein in 1863. He served as medical officer to the Boer Commando which regulated the boundary line between the Orange Free State and Basutoland, and also served in the same capacity in the Basuto War. He also represented several constituencies in the old Volksraad, and was one

of the few who voted against the closer union. He was elected Mayor of Bloemfontein in 1891, and held that office for five years, being Mayor when the British, under Lord Roberts, entered the town. He also represented Bloemfontein at the Coronation celebrations in London, was Curator of the National Museum for twenty years, and is now President of the Medical Society of the O.R.C.

Transvaal.

MESSRS. SMITH, RIVE & Co. are shortly opening another branch at Jeppes' Town Extension.

THE GLOBE PHARMACY, at the corner of De Villiers and Harrison Streets, has recently been closed.

MR. A. FRIEDMAN, Commissioner Street, has removed his business to more commodious premises at the corner of End and Commissioner Streets.

MR. GEO. RANKIN, of Potchefstroom and Klerksdorp, has gone on a hunting-trip up to the Victoria Falls, and will be away for several months.

TWO NEW PHARMACIES have been opened in Johannesburg—one at Fordsburg, by Messrs. Kagan & Co., and the other in Turffontein, a suburb some 2½ miles from the town, by Mr. J. Levin, Hon. Secretary of the Transvaal Pharmaceutical Society.

Rhodesia.

AT the Palace Hotel, Bulawayo, on May 27, Mr. Gilbert E. Truscott was presented by his fellow-members of the Pharmaceutical Society of Rhodesia with a set of gold studs and sleeve-links, on the occasion of his leaving Bulawayo to take up the management of Messrs. Lennon's branch business at East London, Cape Colony. The presentation was made by Mr. W. Dawn Copley, President of the Society, who spoke of the good work Mr. Truscott had done as Treasurer of the Society, and of his popularity in Bulawayo. An address, signed by all the members present, was handed to Mr. Truscott, who, in reply, spoke of the agreeable four years he had spent in Bulawayo and of the kindnesses shown him by his chief (Mr. W. J. Bickle), by the President, and others. Mr. Truscott left by train on the following day (May 28), and many friends were present to bid him God speed.

PHARMACEUTICAL SOCIETY OF RHODESIA.

THE last three meetings of this Society have been chiefly devoted to the discussion and revision of rules, and at the last meeting, which took place at the Palace Hotel, Bulawayo, on May 27 (with the President, Mr. W. Dawn Copley, in the chair), the new rules were adopted. The Hon. Secretary and Treasurer (Mr. E. Blewett) was instructed to have copies printed, and as soon as issued each member will receive a copy in book form. By Rule 14 THE CHEMIST AND DRUGGIST is the adopted trade journal.

A letter was read from Mr. Dobie, one of the members of the Society at Salisbury, calling the attention of the Society to the Customs Conference held at Cape Town and enclosing extract from minute, Section 15, whereby it is suggested that "Medicinal preparations not being drugs in their pure and unmixed state" shall be liable to 25 per cent. duty *vice* 10 per cent. which they are now paying. As this would seriously affect chemists, the members present instructed the Secretary to write to other societies in South Africa asking what has been done in the matter and to have their replies submitted at the next meeting. The Customs authorities admit the unsatisfactory state of the tariff, but instead of trying to define more exactly what comes under the head of 25 per cent. rate they wish to tax almost all drugs at the higher scale thus: Pulv. jalapæ, 10 per cent.; pulv. jalape co., 25 per cent.

MR. GILBERT E. TRUSCOTT notified that by his appointment to the East London branch of Messrs. Lennon (Limited), he was obliged to resign his office as Treasurer. All the members congratulated Mr. Truscott on his appointment, and expressed regret at losing him. Mr. Blewett was elected Treasurer, and, being already on the Executive as Secretary, the double office required one more to form the requisite number of five on the Executive. Mr. Phelps proposed that Mr. Skerrett be elected to the vacancy on the Executive; Mr. Burnett seconded, and it was carried unanimously.